Department of Computer Science and Engineering National Institute of Technology Calicut

NIT Campus (PO), Calicut-673601, India

DCC Meeting Minutes

Date:23-05-2023

Time: 02:30 PM to 03:00 PM

Venue: CSED Seminar Hall

Agenda Items:

- 1. Ratification of the minutes of the DCC meetings held on 19/04/2023, 20/04/2023, and
- 2. Action Taken Action Pending Report of the last DCC meeting
- 3. Ratification of the decision on PhD eligibility criteria
- 4. Ratification on the decisions taken in the faculty meeting on 03-05-2023, regarding the final result preparation of a semester
- 5. Request from Dr. Murali Krishnan to withdraw the application for VRS
- 6. Ratification of the decision taken in the Senate: Modification in the eligibility criteria for
- 7. Discussion on Written test syllabus for M.Tech. CSE (AIDA)
- 8. Co-teaching from Industry expert for the course titled "CS4049D: Advanced Computer Networks" during Monsoon semester 2023-24

The DCC meeting started at CSED Seminar Hall at 2:30 PM. The Chairperson welcomed all members to the meeting.

Agenda Item 1: Ratification of the minutes of the DCC meetings held on 19/04/2023, 20/04/2023, and 27/04/2023

The DCC ratified the confirmation of the minutes of the DCC meetings dated 19/04/2023, 20/04/2023, and 27/04/2023.

Agenda Item 2: Action Taken Action Pending Report.

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Kerala, India

Curricula of UG & PG (2023 admission onwards) are communicated to the Dean Academic Office. There are no actions pending, as per last DCC meeting.

Agenda Item 3: Ratification of the decision on PhD eligibility criteria

DCC ratified the following decision taken through mail DCC regarding PHD eligibility criteria.

Inclusion of the following categories as part of the PhD eligibility criteria for application scrutiny:

1. Candidates having BE/B.Tech and ME/MTech in the branches of EEE or ECE

2. Candidates who have cleared GATE in Computer Science and Information Technology irrespective of their BE/BTech and/or ME/MTech areas.

Dr. SUBHASREE M. Associate Professor & Head Dept. of Computer Science & Engineering National Institute of Technology Calicut NIT Campus (P. O) - 673601, Kerala

Agenda Item 4: Ratification on the decisions taken in the faculty meeting on 03-05-2023, regarding the final result preparation of a semester

- DCC approved the following proposed points related to the result preparation of a semester as per the faculty meeting on 03-05-2023.
 - 1. Faculty member of each course is the sole responsible person for the correctness of the data submitted to the class committee meeting.
 - 2. Any corrections submitted by the faculty after the results are finalized by the class committee meeting will be directly routed through HoD to the Dean Academic.
 - 3. To ensure that copies of the results and result corrections for CSE courses are maintained within the department, all documents both outwards from the department faculty and inwards from the dean academic should be routed through the exam cell.

Agenda Item 5: Request from Dr. Muralikrishnan K to withdraw the application for VRS

DCC has noted down the withdrawal request of the VRS application dated 12/05/2023, submitted by Dr Muralikrishnan K, and resolved to forward the request.

Agenda Item 6: M.Tech. CSE (AIDA)

- (i) Ratification of the decision taken in the Senate: Modification in the eligibility criteria for M.Tech. CSE (AIDA)
- DCC ratified the senate decision of modifying the eligibility criteria for admission to the new M.Tech programme on CSE (Al & DA), so as to enable the candidates possessing integrated BS-MS of 5 years duration also to apply.

(ii) Discussion on Written test syllabus for M.Tech. CSE (AIDA)

NIT Campus (PO)-673601

Kerala, India

Prof Abdul Nazeer K A initiated a discussion on the written test syllabus for the M.Tech, CSE (AIDA) program. The purpose of the screening test and its significance in the admission process were explained. Various topics and subjects were proposed by the members, considering the core competencies required for the M.Tech. CSE (AIDA) program. After a brief deliberation, DCC recommended formation of a subcommittee headed by Dr Muralikrishnan K to finalize the syllabus for the written test.

Agenda Item 7: Co-teaching from Industry expert for the course titled "CS4049D: Advanced Computer Networks" during Monsoon semester 2023-24

Dr Arun Raj Kumar P presented a proposal (Annexure I) to include an Industry expert as a co-teaching faculty for the course titled "CS4049D: Advanced Computer Networks" during Monsoon semester 2023-24. He presented the details of the industry expert, and the course syllabus and the proposed teaching plan by the industry expert. After a brief discussion, DCC decided to recommend the proposal to the chairperson, Center for Industry Institute Relations. .

The meeting ended at 83:00 PM:

Associate Professor & Head

Dept. of Computer Science & Engineering National Institute of Technology Calicut

NIT Campus (P. O) - 673601, Kerala

Annexure I

Department of Computer Science and Engineering National Institute of Technology Calicut

Date: 11.05.2023

Submitted (Chairperson, Centre for Industry Institutional Relations)

Sir,

Sub.: Co-teaching faculty for Monsoon semester 2023-24 ... reg.

I have been assigned "CS4094D: Advanced Computer Networks" course for the Monsoon semester 2023-24. I taught the similar course last year too and I will be handling it for the second time. From the student's feedback orally received last year, it is evident that the students obtained research knowledge on the topics by perusing the ACM/IEEE transaction papers (as part of the assignment). However, students were curious to know from the industry perspective on how such networks are configured, parameters used for performance analysis, and programmed in real time. Therefore, I contacted my under graduate classmate, Mr. Vaibhav Rastogi working as Technical Architect in Equifax, Australia for his technical help (who have 20+ years of product development experience). Mr. Vaibhav provided the consent through email and shared the topics that will bring practical aspects of the class enriching teaching and learning process. The lectures will be delivered online through webex.

Hence, it is requested to do the needful in approving for the benefit of the students in gaining practical exposure on the topics mentioned in the course plan (enclosed).

(Arun Raj Kumar P.)

Course Faculty for Advanced Computer Networks

Encl.: 1. Consent e-mail from the industry expert, Mr. Vaibhav Rastogi

2. Resume of the industry expert, Mr. Vaibhav Rastogi

3. Course Plan

4. Syllabus of the CS4094D: Advanced Computer Networks

5. E-mail received from Prof. Jose Mathew, Chairperson (CIIR)



Co-teaching for Advanced Computer Networks ... requested ... reg.

3 messages

Dr. Arun Raj Kumar P. <park@nitc.ac.in>
To: Vaibhav Rastogi <vaibhav1403@gmail.com>

Sun, Apr 30, 2023 at 6:02 AN

To

Mr. Vaibhav Rastogi Technical Architect Equifax, Melbourne, Australia.

Dear Mr. Vaibhav,

I will be teaching CS4049D: Advanced Computer Networks for final year B. Tech., CSE students in the next semester (July 2023 to November 2023).

PFA the syllabus (page number 80).

As part of co-teaching, industry experts will contribute a maximum of 1/3rd of the contents of the course. The teaching hours for the industry expert is between 10 to 15 hours. Suppose we are planning for 10 hours. Then, per day, 2 hours to be taught. 5 days (10 hours) is required from your end between July 2023 to November 2023.

As per approved norms by the BoG, the committee suggests Rs. 7000 per day, with a minimum of 2 hours of engagement, with a maximum of about Rs 40,000/- per course.

The topics and the class timings (on any day) may be chosen as per the convenience of the industry expert and students.

Hence, it is requested to provide your consent for the same.

Based on the consent, I could proceed further with the approval process.

B2018-SyllabusDocument-FINAL-APRIL-MAY2018_new-min(1).pdf 713K

Vaibhav Rastogi <vaibhav1403@gmail.com> To: "Dr. Arun Raj Kumar P." <park@nitc.ac.in> Sun, Apr 30, 2023 at 5:59 AN

Hi Arun,

I can definitely teach CS4049D: Advanced Computer Networks for 2 hours per month.

Thanks, Vaibhav [Quoted text hidden]

Vaibhav Rastogi <valbhav1403@gmail.com> To: "Dr. Arun Raj Kumar P." <park@nitc.ac.in> Sat, May 6, 2023 at 6:24 AN

Hi Arun.

I can teach the below mentioned subjects. I have picked one subject from each modules

- 1. Wireless LANs and mobile networks
- 2. Application Programming Interface for IPv6

- Transaction-oriented applications
 Web server systems,
 Web 2.0

Thanks, Vaibhav [Quoted text hidden]

Technical Architect

aus365@outlook.com, 0404638495 Kew, Melbourne

SUMMARY

- Technical Architect having focus on Cloud and application transformation, Hybrid cloud, Cloud-Native API Microservices, Data Architecture, Salesforce transformation and FinOps with 20+ years of progressive consulting and product development experience.
- Leading architecture of Fraud and ID portfolio at Equifax consisting many parallel live projects of data center exit, on prem to cloud transformation, hybrid cloud, multi cloud, application transformation, customer facing portals, Salesforce transformation, Cloud-Native API Microservices, Data Architecture, Big Data and Data Fabric. Fraud and ID space at Equifax has close to \$1 billion dollar recent investment and generates millions of dollars in revenue globally every year.
- Vaibhav's role is of an architect who defines the current year and future state architecture aligning with global product and technology strategy. Vaibhav also prepares and presents yearly business cases of a large portfolio.
- 10+ years of experience in BFSI / FinTech domain. Vaibhav is currently leading architecting solutions related to Financial Crime Compliance, Fraud Prevention, Payment Fraud Detection, Identity Verification & Facial Verification. Vaibhav has also worked in domains such as Credit Reporting, Risk Assessment, Corporate Banking, Mortgage backed Security, intangible assets accounting and auto and life insurance.
- Certified in Google Cloud, AWS, FinOps, Scaled Agile and Java
- I year Graduate Certificate in Operations Analytics. Operations Analytics knowledge and experience helps Vaibhav to architect FinOps cloud cost estimation, cost forecasting and operations cost optimization solutions, models and tools.
- Innovator, entrepreneur, risk taker and courageous. Won Gold Medal in GovHack 2018 and was among the top 10000 startups of NASSCOM in year 2014.
- Hands on experience in Java, Spring Boot, AWS, Google Cloud Platform, GCP Dataflow, Google Kubernetes Engine, GCP BigTable, GCP BigQuery, Big Query ML, Vertex AI, GCP Stateful Streaming, GCP Pub-Sub, Terraform, Data Fabric, Kafka, many other GCP & AWS services, Lucid charts, draw.io, TOGAF
- Have 20+ years of hands-on experience and he has worked on many different technology pathways but top 5 words which define his recent experience are (i) Cloud (ii) Salesforce Integration (iii) Cloud-Native Microservices (iv) Data Architecture & (v) Big Data

EDUCATION

Degree/ Subject	School/University	Year of Passing Aug 2013 - Jun 2014	
Executive MBA, Business Analytics	Indian Institute of Management, Kolkata, India		
Bachelor of Computers Engineering	Malaviya Regional Engineering College (MNIT), Jaipur, India	July 1998 - Jun 2002	

CERTIFICATIONS

- FinOps Certified Practitioner 2022
- Google Certified Professional Cloud Architect 2022
- AWS Certified Developer Associate 2021
- AWS Certified Solution Architect Associate 2020
- SAFe Scaled Agile Framework Agilist (2016)
- Sun Certified Programmer for the Java 2 Platform 1.4 (in 2005)
- Sun Certified Business Component Developer for the Java 2 Platform 1.3, Enterprise Edition (in 2005)
- Life Office Management Association (LOMA) certified (2009)

TECHNICAL SKILLS

- · Enterprise Architecture Lucid charts, draw.io, TOGAF. Spotify model
- GCP Cloud (GKE, CE, Cloud Storage, Cloud Functions, pub/sub, Cloud SQL, Filestore, Firestore, Apigee, Terraform, Dataflow, Dataprep, Dataproc, BigQuery)

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- AWS Cloud (AWS CDK, SDK, Lambda, SQS, SNS, Step Function, EventBridge, AppFlow, Fargate, Redshift, Kinesis, ECS, ECR, Docker, Fargate etc.)
- Azure Cloud (ARM, Terraform)
- Programming languages Java, NodeJs, Python, Java Script, Scala
- Integration/API Java Spring Boot, NodeJS, MoleculerJS, Mulesoft, AWS SQS/SNS/Lambda, Oracle SOA, Apigee (Okapi), API Gateway
- Data Architecture/ML/AI Kafka, pub/sub, SQS, SNS, Google dataflow, Google Cloud Composer, Apache Airflow, Google Big Query, Google Data Fusion, Google Data Proc, Elastic Search, TensorFlow, AWS recognition, Big Query ML, ML Ops, GCP Vertex AI
- Business Intelligence GCP Looker, Tableau
- Big Data Apache Flink, Hadoop, Spark, Hive, Impala, HDFS, GCP BigTable, GCP BigQuery, DynamoDB, GCP Dataflow, GCP Dataproc
- Full Stack development NodeJS, Angular, Oracle ADF, Java Server Faces (JSF)
- Java/J2EE MVC technologies (Java, Spring Boot, JSF, Spring, JPA)
- Agile/DevOps/SecOps Terraform, Devops, Jira, GitHub, Jenkins, AWS Code Pipeline, Code Commit, Code Deploy, Code Build, Cloud Formation, AWS CDK, Ansible, Bamboo, ARM, Docker, Kubernetes, Anthos Service Mesh
- Database Google Cloud SQL, GCP Firestore, Cassandra DB, Gramlin Graph DB, DynamoDB, Aurora DB, neo4j, Oracle, MS SQL
- Salesforce, ServiceNow integration using APIs
- Contact Center Nokia SMP Motive, Genesys Telephony

PROFESSIONAL WORK EXPERIENCE

20+ years of strong IT consulting and product development experience. I am documenting the last few years of projects as mentioned below -

Company: Equifax - Australia

Technical Architect

July 2021 - till now

Technologies Used

Java, Spring Boot, Micro Services, Apigee API Gateway, AWS, Google Cloud Platform, GCP Dataflow, Google Kubernetes Engine, GCP BigTable, GCP BigQuery, Big Query ML, Vertex AI, GCP Stateful Streaming, GCP PubSub, Terraform, Data Fabric, Big Data, Looker, many other GCP & AWS services and Salesforce integration

Equifax is running a large multi year on-prem to Google & AWS cloud migration and transformation initiative. Equifax also recently acquired Kount, Midigator and few more companies in this space. Vaibhav is leading architecture to adopt Kount, Midigator etc. solutions in ANZ region and its integration to the existing or to be transformed systems. Apart from integration of new products, Vaibhav is transforming existing on prem products to AWS / GCP cloud. Fraud and ID space at Equifax has close to \$1 billion dollar recent investment by Equifax and generates hundreds of million revenue globally. Each geography where Equifax operate has its on data governance and unique requirements and Equifax insist to have common technology platforms globally to reduce maintenance costs. High rate of business acquisitions and demand of global transformation aligned to each other creates a challenging task for architects.

- Vaibhav is currently leading architecting solutions related to Fraud and ID portfolio at Equifax such as Financial Crime Compliance, Fraud Protection, digital payment fraud protection, Identity Verification & Facial Verification.
- Leading architecture of Fraud and ID portfolio at Equifax consisting many parallel live projects of data center exit, on prem to cloud transformation, hybrid cloud, multi-cloud, application transformation, customer facing portals, Salesforce transformation, Cloud-Native API Microservices, Data Architecture, Big Data and Data Fabric.
- Vaibhav is part of the architecture team of ANZ region and supports and works closely with global counterparts. Architecture roles at Equifax form part of the Architecture practice, overseen by the Group Chief Technology Officer.

Technical Architect

- Vaibbav's role is of an architect who defines the current year and future state architecture aligning with global product and technology strategy. Vaibbav also prepares and presents yearly business cases of a large portfolio.
- Working closely with other enterprise architects, global architects, technical architects, security
 architects, product architects, product managers, product owners, senior technology management, data
 governance & compliance teams, tech business analysts, finops team, tech leads and engineering teams
- Yearly business case preparation for current and next year of initiatives and presenting those to local and global architecture guild for approval. Vaibhav has presented 5 business cases since 2021 and have got approval of more than 10 million USD in business cases funding
- Preparation of context, sequence, logical, deployment/network and data flow diagrams for various architecture solutions for current, transition and target state
- Presenting architecture to security architects and get approval on business case and architecture
- Working with data privacy and data governance team for data compliance, data classification and data governance
- Guided engineering team throughout the development with architectural queries and direction
- Provided domain expertise in DevOps, SecOps & FinOps culture, tooling, delivery methods, and cultural practices
- Lead cloud cost estimation, forecasting and optimization for his portfolio and is part of core FinOps team. Vaibhav has built architectural tools and solutions
- · Helped product and engineering teams with effort estimations
- 50% effort goes in meetings, 30% in preparing architecture solutions, diagrams and documentation and remaining 20% for ad hoc tasks such as research, training, POCs, resolving engineering team queries, responding to emails/chat etc.
- Vaibhav works with various geographies such as Australia, New Zealand, USA, Canada, UK and India.
 Vaibhav's day start at 7 AM to accommodate USA timings for at least 3 days in a week. UK meetings happen at later part of the day but these are not as frequent as with USA.
- Below are some of projects architected by Vaibhav
 - Cloud and application transformation,
 - · on prem to cloud transformation
 - on prem to VMWare lift and shift to cloud
 - edge technology
 - data center migration
 - API first approach based Cloud-Native API Microservices
 - Migration to Apigee API gateway
 - SOAP based to rest API migration
 - Building micro service layer from scratch using Spring Boot, Apigee & Okta.
 - Big Data, Data Analytics and Business Intelligence
 - Data Fabric design
 - Reporting on Big Query data using GCP looker and Tableau
 - Data ingestion to big query data warehouse and to Big table using dataflows, pub / sub
 - · Data retrieval from big table using purposing layer and APIs
 - Architected schema of Big Table
 - Architected solution of retrieving and updating data to and from Big table using API based purpose view layer
 - Legacy on prem Big Data solution migration to GCP Cloud
 - Supervised and unsupervised learning AI algorithms based solution to protect payment fraud and facial recognition
 - Architecting customer facing portal and its integration to Okta and backend systems using APIs
 - Architecting solution for both internal and external facing APIs using Apigee Edge and Apigee Envoy
 - Architecting solution for ServiceNow and Salesforce UI transformation and transformed UI integration to GCP based Data Fabric using Apigee micro services layer
 - Architected solutions for on premises Microsoft Dynamics CRM to Salesforce CRM migration including data migration and its integration to other systems using Cloud-Native APIs
 - Architected cloud based face verification biometric identification solution

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- GKE based integration solution to fetch real time data from Document Verification Service
- Architected solution to replace legacy API gateway with Apigee and defined various integration patterns to be used working closely with API COE
- Architected reporting solutions using Looker and Big Query
- Architected Big Table schema for purpose view layer

Company: Wipro Client: Telstra Purple Senior Cloud Architect March 2021 - July 2021

Technologies Used NodeJS, Moleculer JS, Pivotal CF, Jest, Ansible, Bamboo, Bitbucket, AWS devops, Cloud Formation, Azure devops, ARM, Terraform, Docker, Micro Services, Python, boto3, PostgreSql, VS Code, nginx, Kubernetes, Linux, ReactJS, New Relic APM, PagerDuty, ActiveMQ

Our team manages cloud infrastructure of our customers in aws, azure, gcp, VMWare based hybrid cloud and AWS Edge Computing (AWS Outpost).

Current formal designation is of "Senior Architect" in Cloud Infrastructure Team at Wipro and is responsible for multi cloud, hybrid and edge computing delivery.

- Working to deliver a infrastructure solution involving Micro Services/API, devops, full stack and AWS/Azure/GCP/Hybrid cloud infrastructure along with AWS Outpost Edge computing
- Designed and developed solution for generic health API using NodeJS, Moleculer JS and PCF which calls all existing services and return a consolidated response
- Designing solution to deploy and integrate Microservices / API on multi cloud such as AWS, Azure, GCP, VMWare and AWS Outpost Edge computing
- Designing infrastructure solution for hybrid cloud where VMWare is deployed on AWS, Azure, GCP and Edge Computing
- Designing solution for on premises data center migration to cloud

Company: Seek Integration Lead - CRM March 2020 - March 2021

Technologies Used AWS CDK, Lambda, SQS, SNS, Step Function, EventBridge, AppFlow etc.), AWS Kinesis, AWS Redshift, AWS Glue, DynamoDB, Elastic Search, Airflow, NodeJS, TypeScript, React.js, Genesys

One of the significant transformation programs that SEEK is undertaking is the CRM Transformation program. The CRM project is focused on enhancing SEEK's current Customer Relationship Management system. A key objective of the CRM project is to have all client data integrated and available through one central platform, so SEEK can become more efficient in how it manages multi-functional relationships with its customers, and more sophisticated and targeted in how it engages and delivers insights. This is a large-scale transformation, which has change implications across the entire business.

As the integration lead, Vaibhav is responsible for the development and co-ordination of integration design, build and deployment activities. Vaibhav is expected to both guide and have a strong hands-on role in the development of the solutions and artefacts, working with both internal stakeholders and external vendors.

Below is the detailed description of my responsibilities and the technologies used in this project -

- Lead the architecture, design, development and co-ordination of integration solutions between legacy SAP CRM and Salesforce platforms using server less AWS layer
- Establish and design the AWS cloud based systems integration framework required to deliver the CRM
- Lead preparation of solution and technical design for implementation

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- Engaging with technical and business team members to ensure integration build activities are delivered in line with project budget, schedule and solution requirements
- Provide technical oversight, and advice to external vendors and internal developers relating to integration design and build activities
- Co-ordinate and participate in design, build, testing and deployment work with external vendors and internal technical teams
- Facilitating integration requirements workshop with business and technical resources
- Assisting in the development and execution of test phase activities for integration/interface testing
- Providing solution governance advice and direction across the integration solution to ensure correctness and quality of the end-to-end solution
- Collaborate with the Architecture Teams across SEEK to ensure the recommended CRM solution architecture (including integration) is well considered and appropriate.
- Drive the delivery of CRM technology and integration requirements and solutions.
- Ensure the right technology team members are sourced and available to deliver to program timelines.
- Maintain ongoing collaboration and planning with relevant stakeholders to effectively manage resources and dependencies.
- Drive clear communication and status reporting to inform project planning and resourcing requirements as well as managing expectations for broader stakeholder groups.
- Resolve issues and mitigate risks through effective collaboration and negotiation with the project team and stakeholders.
- Drive a continuous improvement culture in delivery stream through regular retrospectives, as well as ongoing practice and process adjustments.
- Effectively share knowledge with other project and business teams to ensure learnings and improvements are implemented throughout the wider SEEK business

Company: Infosys

August 2016 - March 2020

Lead Consultant (Integration Architect / Tech Lead)

He has worked at various projects at Infosys and all focused on telecom clients such as Telstra, NBN and Optus.

Role:

Data Warehouse migration and Integration Architect

Ctient:

Duration:

July 2019 - March 2020

Software Used

Tableau, Cognos, Microsoft SSIS, Mulesoft, Adobe Marketo, CRM, Teradata, BI, Data

Warehouse, Integration, AI, Microsoft SQL Server

Responsibilities:

He was part of Optus Business IT division. Optus was running a large scale Data warehouse & Big Data migration project to use Amdocs BCC Jarvis, Teradata, CloudEra products and related solutions and he was part of this effort. As part of this migration all of the Optus Business reports were rewritten in Tableau, Cognos & Cognos TM1. Most of the existing systems needed data remediation and we used Microsoft SSIS for data remediation. Apart from this he was responsible for integration of Adobe Marketo product which is used by Marketing team to custom CRM system using Mulesoft 3.8.

- Lead architecture, design and application development of BI & Data warehouse migration project
- Designed solution for Mulesoft Integration project to integrate Adobe Marketo to custom built CRM
- Lead the design and implementation for 18 Tableau & Cognos reports for Business Finance which are integrated to Teradata data warehouse and Cloudera Big Data in various Sprints using Agile methodology
- Designed solution to integrate CRM sales system to Marketing system using Mulesoft in various Sprints using Agile methodology
- Designed solution for implementation of CRM system built in Outsystem technology
- technology Marketing system Marketo solution of Designed Various stakeholder management

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assigned

modules

 Involved in these projects since idea inception till delivery including pre sales activities of estimations, statement of work submission and PO approval

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Role:

Cloud Big Data Architect

Client:

NRN

Duration:

July 2018 - July 2019

Software Used

Big Data, AWS, Apache Flink, Graph Database, Data Ingestion, S3, AWS VPC, IAM,

SSM, Cloud Watch, Cassandra, Eiastic Search, Janus Graph, Github, Apache Flink,

Java, Elastic Search, Fluentd

NBN has a large inventory of assets details stored at various systems. Service Network Inventory Management (SNIM) program at NBN pulled data from all the systems within NBN and stored data at SNIM Big Data on AWS cloud. My role in this project was of a Big Data integration specialist.

Responsibilities:

- · 100% hands on individual contributor role
- Worked as big data specialist to deliver SNIM Big Data enhancements for Fixed Wireless, DWDM, HFC, FTTX
- · Played hands on technology expert role and helped the team to pass through smoothly for complex deliveries
- Designed and architected various technical solutions for AWS and Big Data
- · Brought big data and AWS experience to the team at critical stage and brought productivity from day one
- Lead performance improvement initiative and achieved 64% improvement in download reports and Summary Page
- Project technology stack is very diverse and have used most of the AWS technologies including S3, AWS VPC, IAM, SSM, Cloud Watch, Cassandra, Elastic Search, Janus Graph, Github, Apache Flink, Elastic Search, Fluentd etc.
- Stakeholders management and
 Performed Tech Spike for various complex modules

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Role:

Technical Lead

Client: Duration: Telstra

Duration:

Aug 2016 - July 2018

Software Used

SDN/NFV, Cloudify, Machine Learning, Open Stack, Groovy Script, Nokia SMP

communication

Motive, Spring Boot, Apigee, Service Now, Java

Responsibilities:

SDN/NFV

 Worked on internal product development of Infosys on SDN, VNF domain o Automation of Tosca YAML conversion to Cloudify DSL and end to end automation of VNF onboarding on Cloudify

o Automatic deployment to open stack from cloudify using Tosca templates

Machine Learning

o Creation of machine learning based solution for traffic management for NFV and SDN o Video Magnification using Machine Learning

Telstra Open Cloud implementation (TNC01 TNC02) o Part of technical design team to validate the vendor design for Open Stack cloud design data backup and recovery for all the cloud modules

Customer Service Assurance enhancement project (CSC & SSC)

- Lead Groovy Script based Nokia Motive and tableau/Oracle Apex based analytical dashboard development project at Telstra client for Infosys

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 Lead development of Nokia Big Data sync up with Telstra Big Data in batch scheduling and real time mode Apache Spark and Java based batch Customer Service Console (CSC) is used by 5000+ agents to troubleshoot retail customer network issues on non products legacy · Support for mobile based Self Service Care (SSC), which is used by retail customers to troubleshoot their Making enhancements to Nokia Motive BAU workflow work of ADSL, Cable, PSTN, TBB-DOT, Telstra Air, Telstra TV, Telstra Smart Home, BBS and Big back of house products in 2 weeks agile Sprints mode analytical dashboard Oracle Apex Regular reports generations and communications. Few reports are Sprint Status reports, Sprint and Project efforts resource forecasting, Sprint Planning estimation, leave plans, Regular analytical reports monitoring and generating new reports for improvement of process · Proposed architecture changes of moving to cloud based Rest API from Monolithic application using Okapi Gateway, Spring Boot Micro Services & Pivotal Cloud Foundry

Migrated Nokia SMP based application to Service Now

Role:

Expert Software Engineer (Technical Lead)

Client: Duration:

Misys (Finastra)

Jan 2016 - August 2016

Software Used

Java, Spring Boot

Vaibhay was leading the Misys FusionBanking Corporate Channels integration framework developed.

Company: Accolite / Nokla **Technical Delivery Manager** November 2014 - January 2016

Accolite is fast growing software consulting organization. He worked on a telecom product development project for Alcatel Lucent (Nokia) client at Bangalore. We made enhancement to an existing telecom product named "Service Management Platform (SMP)" for an Australian client. This product is used by customer service representatives to test and diagnose the telecom network. We extended the existing functionality to satellite services & FTTB.

Below is the detailed description of my responsibilities and the technologies used in this project -

Role:

Senior Java Technical Lead

Client:

Alcatel Lucent

Duration:

November 2014 - January 2016

Software Used

Maven, Java, Rhino Script, Java Script, Juel Expression, NodeJS, Backbone JS, Apache Service Mix, Service Management Platform (SMP), Weblogic, Hibernate,

Spring, Servlets

Platform

Windows 7, Linux

Database

MySql

Responsibilities:

- Lead a team of 10 resources deputed to client side at Bangalore
- Talent/Resource planning with Engagement Manager and BU head
- Weekly Status reporting to Project Management Office
- Weekly Timesheet reporting to Project Management Office
- Participated in hiring process by taking interviews and collecting feedback from client for improving hiring process
- Part of weekly resource planning calls with client Senior Manager and client director
- Preparation of RFP for contract renewal

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- Leave Tracking and approva!
- · Daily scrum call with the team
- · He played individual contributor role for below mentioned activities -
 - Writing a Cron Java program to move Birth Certificate of network connection to database fetched from a web service.
 - Resolving design queries with onsite Architect team
 - Writing a quartz scheduler to issue a JMS notification on certain condition
 - o Fixing System Testing defects
 - Performing Unit Testing on various modules
 - Involved in high & low level design discussions

Company: Archi Pages Services Pty. Ltd.

Founding Director www.archipages.in

Apr 2014 - Nov 2014

After finishing his Executive MBA, Vaibhav has taken break for 8 months to try real hands on experience in business and startup. Vaibhav and his wife founded a company named "Archipages Services Pty Ltd" in Bengaluru. Vaibhav was able to add almost 300 customers on the portal in a span of 6 months and he did generate revenue as well. Vaibhav built and maintained entire Web portal single handedly.

He also participated in NASSCOM 10000 startup program and was selected in the 2nd round. He was offered a space in startup village and few goodies apart from connecting him to investors and mentors by NASSCOM startup program. It was a good learning experience and he has completed his business education in real sense as he has got hands on experience in business and startup.

http://10000startups.com/overview

His startup was www.archipages.in (site is down now). It was on similar lines to https://pdf.archiexpo.com/ and https://www.arcat.com/ but focused only on Indian market and products. If an Architect wants to look for a catalogue, google may not be effective and there is a need of specialized and customizable search engine.

Company: Laurus Infosystems, Bangalore Manager

Oct 2013 - April 2014 Senior

Laurus Infosystems has a flag ship project as Clinicopia. We worked on one module of Clinicopia as "Online Web Approval". We developed this modules from scratch and it is being sold as a separate product. Laurus hired me in anticipation of one big project but that project did not come and got postponed.

Below is the detailed description of my responsibilities and the technologies used in these projects -

4

Role: Oracle ADF/Java Specialist

Client: Catalent

Duration: Oct 2013 - April 2014

Software Used Java, ADF 11g, Weblogic Server 11g, Glassfish Server, Ideveloper 11g, PL/SQL,

JavaScript, Groovy Script, JMeter

Platform Windows 7, Unix
Database Oracle Database 10.2

Responsibilities:

- He was hired as ADF expert for this project
- Project was already started when He joined the project. Vaibhav's task was to review the tasks of the team and help them with complex problems.
- He has done a thorough review of the project and restructured the architecture of the project. For example breaking the pages to fragments, using more task flows, proper exception handling etc.

Technical Architect

aus365@outlook.com, 0404638495 Kew, Melbourne

- He shared the ADF best practices with the team.
- He has done complex POCs for the project and also helped them to fix complex defects.
- Changed application to be used and deployed on Glassfish along with being deployed on Weblogic server.
- Availability of 99.9%
- Performance improvement
- Security of a web based ADF application
- Load testing of 75 concurrent users
- ADF is new to market and there are not many web applications deployed on internet. We are one of the very first
- ADF was very new when we started, so this required a lot of convincing, and conviction.
- The application we were developing was to be sold as a separate product and it is main revenue generator
 of the firm.

Company: Excelencia Consulting, Chennai Project Manager

Aug 2012 - Sept 2013

He worked for a smaller organization with very high growth potential. He was handling multiple clients which include a Fortune 500 client in Heavy Engineering and Constructions domain and a consulting organization which is into Utility domain. He played the role of Java/J2EE/SOA Project lead along with playing the individual contributor role at Excelencia.

Some of the projects on which he was working at are as mentioned below -

- A US based consulting firm: CRMOD integration with EBS using SOA 10g. We also created
 JSP/Apache Axis based UI on tomcat. We created synchronous, asynchronous and batch process using
 bpel. We synced up Contact, Activity & Accounts modules of CRM to EBS using SOA. CRM
 maintained integration queue for each of these modules and this queue was getting filled up when we
 create new records or modify the existing one at CRM. Using SOA bpel components we fetched records
 from this queue and moved them to EBS using DB adapter.
- HRSkills: Java, ADF development project for existing J2EE application to ADF conversion for Fortune 500 corporate intranet application being used by employees to update their skills
- eDiscovery: An ADF/Webcenter/UCM development project from scratch for Fortune 500 client
- Green Mountain Power: Java, ADF/Webcenter, SOA/WebServices customization project for Green Mountain Power, Vermont utility service organization, to customize Webcenter based OUCSS (Oracle Utility Customer Self Service) application on Linux platform.
- Script Automation: Java, ADF/Webcenter deployment script automation to deploy adf/web center application
- PMReport: Report generation using iText. Language translation for Java/JSF project for Fortune 500
- UtilApps: Struts based project for enhancement & language translation for fortune 500 client
- Capstone: Enhancement project in Java, Struts 1.3, jQuery & AJAX technologies for Capstone
- EmailSignature: Java Swing Applet based project to generate email Signatures automatically for Fortune 500 client.

Below is the detailed description of my responsibilities and the technologies used in these projects -

•

Role:

Java/J2EE/SOA/ADF Senior Lead

Client: Duration: Tetra Tech

Software Used

Aug 2012 - Sept 2013

Java, Struts 1.3, jQuery, JSF, Ajax, ADF 11g, Webcenter 11g, SOA 10g, Web Services, Weblogic Server 11g, Jdeveloper 11g, PL/SQL, OAM, Enterprise Maneger, UCM,

Oracle EBS 11g, JavaScript, Groovy Script

Technical Architect

aus365@outlook.com, 0404638495 Kew, Melbourne

Platform Database

Windows 7, Unix Oracle Database 10.2

Responsibilities:

- He played the role of Java/J2EE/SOA Technical lead with this organization. It was more of an Individual Contributor role.
- He was involved with 9 different projects on varied technologies with just 3 more fresher for my help.
 My current technology base included SOA, ADF, Webcenter, JSF and Struts.
- He was responsible for finalizing the technical architecture and design of these projects.
- He was involved in Oracle CRM to Oracle EBS integration using SOA. I designed architectural solution for this project. I prepared the design and lead the implementation of this project.
- He played the role of consulting and mentoring other team members with their technical design and coding challenges.
- He was taking entire development responsibility and monitoring reviewing work done by other team members. I am also taking responsibility to code few modules myself and fix some complex defects.
- He coordinated with client lead developer on daily basis to discuss technical design and related issues.
- Following Agile software development model to build the software. Agile model focus on multiple iterations of software development life cycles (SDLC) to deliver the end product.
- ADF was new for client and I was the senior most person in Java technology at my consulting firm so all architecture, design and coding best practices decisions were taken by him independently.
- He shared the ADF best practices with client and my team and made sure that everyone follows that.
- Developed a watch man process for continuously monitoring the queue for message processing. Running
 a single process infinitely was causing heavy memory usage so optimized by using two processes which
 hand over control to each other in every 5 minutes.
- He has suggested the better way of deploying the ADF application using ANT script. ADF libraries are very heavy of 400 MB size so these should be read from a remote location.
- While developing ADF application we kept considerations of it being easily integrate able with Webcenter portal. Some of the considerations are not using pop up messages and using more fragments and task flows.

Company: Oracle Corporation, Bangalore Senior Consultant (Application Architect)

Aug 2010 - July 2012

He has worked on 2 different projects for 2 different clients. First project was on pure ADF development for Delta Dental client. Second project is for American Express client who involves development in ADF & SOA and their interaction. He played the role of "Application Architect" and "Module Lead".

Below is the details description of my responsibilities and the technologies used during this project -

→ Role:

ADF Application Architect & Module Lead

Client:

American Express, Delta Dental

Duration:

Sept 2010 – July 2012

Project

A software development project

Software Used

Java, ADF faces, ADF bc, ADF Task Flows, Weblogic Server 11g, Jdeveloper 11.1.1.3,

SOA, PL/SQL, JSF, JavaScript, Groovy Script, Web Services

Platform

Windows XP

Database

Oracle Database 10.2

Responsibilities:

- He was one of the 3 application architects in a 50+ team size project. I do hands on day to day basis and also mentor other team members.
- He also played the role of a module lead and have successfully lead one of the development release which consisted 5-6 people.
- He was involved in finalizing the technical architecture of Java/ADF/SOA development project.

Technical Architect

aus365@outlook.com, 0404638495 Kew, Melbourne

He played the role of consulting and mentoring other team members with their technical design and coding challenges.

Technical Design: He was involved in preparing the basic building blocks for technical design for the development team to start.

Coding & development: He has taken responsibility to code few modules himself using Java/ADF.

Testing & Defect fixing: He was involved in unit testing the developed modules and fixing the defects.

Followed Agile software development model to build the software. Agile model focus on multiple iterations of software development life cycles (SDLC) to deliver the end product.

Coordinating with onsite consultant.

Interacting with client business analysts for requirement clarifications & understanding.

Although his main responsibility lies with ADF development still he had interaction with SOA components and have interacted with SOA human task flows from ADF application.

He has reviewed and worked closely with SOA resource creating business rules for the application.

Company: Tech Mahindra, Bangalore

Tech Lead

Dec 2009 -- Aug 2010

Role:

Java / JEE Tech Lead

Client: Duration:

British Telecom Dec 2009 - May 2010

Project

A software product development project

Software Used

Java, Struts 2.0, iBatis 2.0, Spring 2.5, Ant, Tomcat 6.0, Apache CXF, Eclipse Europa,

Web Services, StarUML, Ajax, Dojo, JavaScript, log4j, HP Quality Control, JUnit,

jQuery

Windows XP, Linux

Platform Database

Oracle10g

Team Size:

30

Project:

SOE (Sales Quote Engine)

It was one of the best projects he has worked on. He got good responsibility and have lead a team of 30 people at

Company: Infosys Technologies Limited, Bangalore Technology Lead (Java / JEE)

August 2006 - Dec 2009

Below is a snap shot of my various roles and responsibilities.

Client Name	Role	Technologies	Tenure	
Telstra, Australia Tech Lead		Java, Weblogic Portal 10.3, Oracle Service Bus 10.3, Oracle Universal Content Management Server (UCM), Web Services, JSF 1.1, Spring 2.0, Hibernate 3.0, JMS, SOAP, Clear Case, EJB 3.0, Weblogic Workshop, JavaScript	1 Year Dec-2008 to Dec - 2009	
Insurance Unit of Infosys	Lead Unit Planning & Assurance	urance Services, Windows XP, MS SQL Server 2005, .NET, Marance JavaScript, Tomcat, Eclipse		
Cardif, France	Tech Lead	Java, JSP, JDBC, J2EE, Struts, Hibernate, Web		
Ameripress, USA Tech Lead		Java, JSP, JDBC, J2EE, Hibernate, Windows XP, Unix, DB2, JBoss, Eclipse, JUnit, JavaScript, Web Services	14 months Sept-2006 to Oct 2007	

Technical Architect

aus365@outlook.com, 0404638495 Kew, Melbourne

Company: VLS Systems Inc, Chantily, VA, USA

Client: Fanniemae

January 2006 - July 2006

Programmer Analyst (Visual Basic / J2EE Developer)

Below are the details description of my responsibilities and the technologies used during this project -

-

Role: Project

J2EE Developer / Visual Basic A Software migration project

Software Used

Java, JSP, J2EE, Visual Basic 6.0, Visual Basic 5.0, Crystal report 9.0, Crystal Report

8.5, Crystal Report BOXI, Rational Rose, Visual Basic .NET

Platform

Windows 2000, Windows XP, VB Script

Database

Sybase

Worked on an application called Investment Agreement which is used for accounting of non cusip assets. This application was built on Visual Basic 6 and he has fixed few defects in this application using Visual Basic and was involved in initial analysis to move this application to Java platform. Modified the application to fit into regulatory requirements of sarbanes oxley.

Company: Data Concepts Inc., Richmond, VA, USA

Client: Scholar One, Charlottesville

July 2005 - December 2005

Programmer Analyst (J2EE Developer)

Below are the details description of my responsibilities and the technologies used during this project -

→ Role:

J2EE Developer

Project

A software product enhancement project

Software Used

Java, JSP, Servlets, XML, Struts, Weblogic Application Server 8.1, Weblogic Express,

Rational Rose, JUnit, JNDI, JDBC, Web Services, Hibernate 2.0, Apache Axis 1.3,

WSS4J, Eclipse, JavaScript

Platform

Windows 2000, Windows XP

Database

IBM DB2

Worked as Java developer for product Manuscript Central. Used a framework which is similar to struts.

Company: Patni Computer Systems

Client: Statefarm Insurance, USA

Aug' 2002 - July 2005

Senior Software Engineer (Visual Basic Developer & Server Technology / Middleware Analyst)

Role:

Visual Basic Developer

Project

Software development project

Software Used

Visual Basic 6.0, ASP, VSS and Crystal Report 8.0, VB Script

Platform

Windows NT, IBM Mainframe

Database

IBM DB2

Duration

August' 2002 to July' 2003

He has played role of Web application developer for custom built CRM applications. He has used Visual Basic 6, VB Script, HTML, IBM DB2, DLL, COM, DCOM and related technologies. He worked on applications such as National Catastrophe Team Tracking System (NCTTS), Catastrophe Personnel Tracking System (CPTS), Catastrophe Information Management System (CIMS). He later played the role of Server Technology Analyst in Web Technology team to manage the base profile of various server loads and to issue hot fixes on these servers. He worked at Pune offshore development center for few initial months and later moved to corporate head office in Bloomington, IL, USA.

Department of Computer Science and Engineering National Institute of Technology Calicut

COURSE PLAN

Title of the course

: CS4094D - Advanced Computer Networks

Name of the industry expert

: Vaibhav Rastogi, Equifax, Australia

S. No.	Module Number	Topic	
1.	1	Wireless LANs - Connection configuration and real time tracing analysis using CISCO packet tracer	
2.	1	Mobile Networks - Past, Current, and Future	
3.	1	Mobile Networks - Configuration and Management	
4.	2	Application Programming Interface for IPv6 - Core socket functions	
5.	2	Application Programming Interface for IPv6 - Advanced socket API (RFC 3542)	
6.	2	Application Programming Interface for IPv6 - Ipv6 Aware Network Programming	
7.	3	Transaction oriented applications - TCP's performance in transaction oriented applications	
8.	3	Transaction oriented applications - How to meet the demands of transaction oriented applications in different industry?	
9 .	4	Web server systems	
10.	4	Wed 2.0	

CS4049D ADVANCED COMPUTER NETWORKS

Prerequisites: NIL.

Total Hours: 39T+26P

L	Т	Р	С
3	0	2	4

Module 1: (10T+7P Hours)

Introduction- Internet design philosophy, Layering and end to end design principle. MAC protocols for highspeed LANS, MANs, Wireless LANs and mobile networks, VLAN. Fast access technologies.

Module 2: (10T+7P Hours)

IPv6: Why IPv6, Basic protocol, extensions and options, Support for QoS, Security, Neighbour discovery, Auto-configuration, Routing. Changes to other protocols. Application Programming Interface for IPv6, 6bone. IP Multicasting, Wide area multicasting, Reliable multicast. Routing layer issues, ISPs and peering, BGP, IGP, Traffic Engineering, Routing mechanisms: Queue management, Packet scheduling. MPLS, VPNs

Module 3: (10T+7P Hours)

TCP extensions for high-speed networks, Transaction-oriented applications. New options in TCP, TCP performance issues over wireless networks, SCTP, DCCP.

Module 4: (9T+5P Hours)

DNS issues, other naming mechanisms, Overlay networks, P2P networks, Web server systems, Web 2.0, Internet traffic modelling, Internet measurements. Security – Firewalls, Unified threat Management System, Network

Access

Control.

References:

- 1. A. Farrel, The Internet and its protocols a comparative approach, Elsevier, 2005
- M. Gonsalves and K. Niles, IPv6 Networks, McGraw Hill, 1998.
- 3. W. R. Stevens, TCP/IP Illustrated, Volume 1: The protocols, Addison Wesley, 1994.
- G. R. Wright, TCP/IP Illustrated, Volume 2: The Implementation, Addison Wesley, 1995.



Need to bring industry collaboration: Fwd: Consolidated list of openelectives for Winter semester 2022-'23

Centre for Industry Institutional Relations <ciir@nitc.ac.in>
To: All Faculties <fac_all@nitc.ac.in>

Fri, Nov 25, 2022 at 4:43 PN

bexbe This message is eligible for Automatic Cleanup! (clir@nitc.ac.in) Add cleanup rule | More info

Dear all,

This is to remind you all once again, try to bring more industrial collaborations. One easy way to start is through Coteaching some of the existing electives-wherever possible (open or departmental).

We may request experts from our MoU collaborators.

The procedure for bringing an expert for Co-teaching is simple; I am copying the relevant portions of the approved rules again. We have about 18 Co-teaching approved by the Director this semester and are currently running. Hope more such requests will come during the coming semesters.

-Co-teaching Faculty:

- a. One of the ways, deviating from the above three modes of engagement, by which the institute can handshake with industry is to enlist the support of industry experts/other experts in the field in teaching and evaluation of part of course in the institute. Co-teaching by which 10 15 lectures, subject to a maximum of 1/3rd of the contents in a course, delivered by experts from industry will bring practical aspects into the class thus enriching teaching and learning. It is encouraged to conduct such co-teaching classes through hybrid mode as much as possible. The course faculty from NITC side and the students will gather in the lecture hall where the industry expert will deliver lectures online. The selection procedure may be simplified in which industry expert(s) may be proposed by a course faculty to the Chairperson-CIIR including the resume of the expert and a clear course plan, consent and with recommendations from concerned HOD/Centre-Chairperson. With the further recommendation from the Chairperson-CIIR, the Director may approve the engagement of Co-teaching faculty member(s) from the industry/profession for the specified course. Course plan and class schedule must be ratified by the class committee. Objections, if any, by the class committee may be reported to the Director through Chairperson-CIIR for appropriate action.
- Duration of engagement: 1 Semester (total lectures by all Co-teachers in one course may not exceed 1/3rd of the total number of lectures in the course engaged), in general.
- c. Eligibility: Persons working in industry organizations in product design and technology development with adequate experience in industry, Physicians and other established Professionals, serving as well as retired.
- d. Remuneration: Per day/Per Lecture consolidated honorarium may be paid. As per approved norms by the BoG, the committee suggests Rs 7000 per day, with a minimum of 2 hours of engagement, with a maximum of about Rs 40,000/- per course. Exceptional cases where we do not have enough expertise, the number of experts and the total limit can be increased with the permission of the Director on the recommendation of the duly constituted committee.
- e. Other benefits:
 - i. Online lectures in hybrid mode are encouraged as much as possible. Therefore travelling allowances are not allowed. Special cases may be

considered with the approval of the Director.

 Lodging and Boarding for the days of stay at suitable transit accommodation/guest house is to be provided by the department if a visit to campus is required.

The emoluments mentioned are inclusive of applicable taxes. Services of distinguished Alumni may be utilised as far as possible, and they may be even happy to offer it free to the Alma mater. This will promote more involvement of distinguished Alumni in our curriculum, syllabi revisions and our pursuit towards academic excellence." Many of them showed interest in helping us.

Further details may be obtained from CIIR Team

Soliciting your cooperation,

Thanks and regards,

Dr. Jose Mathew
Professor (HAG)
Department of Mechanical Engineering
Chairman, Centre for Industry Institutional Relations (CIIR)
https://www.nitc.ac.in/index.php/?url=department/index/75
[Formerly Dean (R&C), Chairman TBI, Head MED]
National Institute of Technology Calicut
N. I. T. Campus (PO), Calicut,
Kerala, 673601, INDIA
Lab: http://www.amc.nitc.ac.in/

Tree, Save the World.

----- Forwarded message ------

From: Timetable Nitc <timetable@nitc.ac.in>

Date: Fri, Nov 25, 2022 at 2:34 PM

Subject: Consolidated list of open electives for Winter semester 2022-'23

To:

Dear Sir/Madam,

Consolidated list of open electives for Winter semester 2022-'23 offered by various departments/ centres is attached herewith. Please forward the same to the S6 and S8 UG students of your Department through their FAs

I request SAC to circulate this to **S6 and S8 UG students**, for the smooth conduct of open elective allocation. Schedule of Open Elective allocation through online portal will be given in due course.

Institute Timetable

Consolidated list of Open Electives_Winter Sem 2022-23.pdf 4101K