

Arush Agarwal

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EDUCATION

Northeastern University

Master of Science, Computer Science

August 2022 – Expected May 2024

CGPA: 4.0/4.0

Netaji Subhas University of Technology

Bachelor of Technology, Electronics and Communication Engineering

August 2016 – June 2020

CGPA: 8.02/10 First Class

TECHNICAL SKILLS

Electives: Programming Design Paradigm, Database Management System, Algorithms, Data Structures

Programming Languages: Java, C, C++, JavaScript, Python, UNIX Shell Scripting

Databases: MySQL, MongoDB, CassandraDB

Web Development technologies and frameworks: ReactJS, NodeJS, Java Servlets

Application Development: Android, React Native

Big Data Ecosystem: Hadoop, HBase, HDFS, MapReduce, HiveQL, Apache Spark, Sqoop, Scala

PROFESSIONAL EXPERIENCE

Software Development Engineer

American Express

September 2020 – August 2022

Gurgaon, India

- Designed and delivered a parallel ETL workflow architecture using Hadoop ecosystem tools and framework to enhance data freshness with more regularity with an annual estimated PTI benefit of **\$13.MM**.
- Optimised the DaaS setup by adding functionalities to preprocess and load large sets of JSON and XML files into HDFS reducing manual workload by **20% monthly** and error rate in setup by 7-8%, working closely with product managers for gathering requirements.
- Worked on optimisation of similarity searching tool with Locality Sensitive Hashing leveraging advanced fuzzy algorithm with a decreased **False Negative by 0.8%**.
- Transformed, Integrated and engineered java based micro-services leveraging **Vertx and Apache Camel** to collaborate with 30+ external bureaus and load data in data engine to lift capture rate and improve next gen CDSS/TSR models.
- Mentored and supervised newly formed production support team comprising of 8 members to deliver prompt assistance in incidents and task resolution leading to prominent tech team satisfaction.

Software Development Intern

Pepcoding Education Pvt Ltd

June 2019 – July 2019

Delhi, India

- Interned as part of platform team to manage backend modules for online coding application using NodeJS and other backend technologies such as ExpressJS and MongoDB to make system more scalable and faster.
- Integrated and setup various 3rd party APIs to include features such as social media login, screen share and real-time feedback from TA through chat thus making application feature rich and more interactive for students.
- Worked in a team of 3 on mobile responsive user experience with React allowing cross platform accessibility to website increasing target audience engagement by 20-22%.

PROJECTS

Stock portfolio application | *Java, Swing*

- Developed a simulation of share broker app allowing users to trade stocks and create multiple types of portfolios.
- Added functionalities to allow multiple buying and selling of stocks and invest in portfolio through a regular SIP of any duration and also to visualize performance of portfolio during a range through bar and line graphs.
- Implemented various design patterns such as adapter, builder, command, builder design patterns to enhance the modularity and structure of the project adhering to the SOLID principles.

Enterprise cloud vault | *React, NodeJS, CouchBaseDB*

- Replaced the manual and error prone process of updating the enterprise vault with an interactive UI created on ReactJS and an automated consistent backend to eliminate sync up issues leading to deployment failures and delay in deployment.
- Designed a consistent database couchbaseDB which contained all passwords in the vault which can be modified only with particular credentials thus creating a safe environment for sensitive information

PUBLICATIONS AND AWARDS

- Arush Agarwal and Akhil Dixit, "*Fake News Detection: An Ensemble Learning Approach*", 2020 4th International IEEE Conference on Intelligent Computing and Control Systems (ICICCS), Madurai, India, 2020, pp. 1178-1183, doi: 10.1109/ICICCS48265.2020.9121030.
- Scored first rank in the online technical hackathon conducted in American Express for credit and fraud department. Improved and automated the current enterprise cloud vault by removing manual human efforts