

GARVIT KATARIA

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EDUCATION

Carnegie Mellon University, Pittsburgh, PA

December 2022

Master of Information Systems Management

Current Coursework: Cloud Computing, Data Structures for Application Programmers, OOP in Java, Database Management

Vellore Institute of Technology, Vellore, India

July 2021

Bachelor of Technology in Information Technology

GPA: 4.00/4.00

Relevant Coursework: Data Structures, Software Engineering, Machine Learning, Software Project Management

SKILLS

Programming – C++, Java, Python, JavaScript, SQL, Bash, Linux, Cloud Computing

Tools and Frameworks – AWS, Azure, GCP, Docker, Kubernetes, Spark, React, React Native, Flask, Kafka, Samza

Database – MySQL, MongoDB, Apache HBase, Neo4j

PROJECTS

Advanced Resource Scaling of Distributed Services on Cloud

January 2022 – February 2022

Aim: Invoke cloud APIs to programmatically provision and deprovision cloud resources for a dynamic load

- Achieved elasticity and handled load variability for a QR encode/decode application by defining autoscaling strategies
- Containerized the application using Docker, deployed it on a Kubernetes cluster and achieved throughput of 70k requests per second within the budget of \$0.70 per hour
- Identified downstream service failure, routed traffic away from a failed cluster and scaled up the service in an alternate cluster using auto-scaling rules

The Smart Pill Bottle: Detect Pill Bottle using Touch Screen's Capacitance

November 2020 – March 2021

Aim: To identify the pill bottle by simply placing it on the phone's touch screen

- Engineered conductive-ink stickers (imitating human finger-like touches) to create a unique pattern on the touch screen
- Developed a cross-platform application to decode the pattern and ascertain user medicine name, dosage, number of pills remaining and if pill has been taken
- Received funding from National Taiwan University and achieved a System Usability Scale score of 85.94 for 30 candidates
- Built using JavaScript, React, Google Speech-to-Text API, Node.js and designed with Material UI

WORK EXPERIENCE

Noida Metro Rail Corporation

Delhi, India

Data Analyst Intern, Delhi-NCR Metro Rail Services

September – December 2020

- Analyzed CCTV footage at metro stations using OpenCV to gather data about whether social distancing was being followed, percentage of people wearing masks, and number of people inside the station premises
- Performed exploratory data analysis to locate hotspots, identify location-time patterns and plan spaced commuting, reducing staggering of crowds by 23%

Defence Research and Development Organisation

Delhi, India

IT Intern, Military Research and Development

June – July 2019

- Surveyed, interviewed, and collaborated with stakeholders to list the requirements for developing an online portal for hiring interns, managing records, and analyzing data
- Reduced 30 hours of manual work every month by optimising the flow of information and automating the process of generating monthly consolidated statistics, provisional allotment letters

Bitgrit Inc.

Delhi, India

Web Development Intern, AI Competition & Recruiting Platform for Data Scientists

April – June 2019

- Collaborated with the Japanese team to develop a full stack competition platform following Scrum methodology
- Used React and Django for listing data science competitions where users can form teams and compete for prizes
- Created 10+ screens for registration, login, and live competition and optimized SQL queries, augmenting search time by 10%

LEADERSHIP AND AWARDS

- **Outreach Head, IETE-ISF, Headed Synergy** – a tech symposium with the participation of 1500+ students **December 2020**
- **Dean's Merit List '18, '19 & Recipient of Special Achiever Prize '19, '20** **November 2020**
- **HackOff, Major League Hacking Asia-Pacific** – 2nd among 300 students **January 2020**
- **YHack - Yale University, New Haven** – 1st in JetBlue airline track among 120+ selected teams **October 2019**