Saurav K. Ghosal

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Education

Georgia Institute of Technology, Honors Student | Atlanta, GA   *Graduation December 2022*

Bachelor of Science in Computer Science: Intelligence & People threads, GPA 4.0

Skills

Programming Languages: Java, JavaScript, Typescript, Python, SQL
Technologies/Tools: NextJS, Vue, Vite, Python Flask, Node/Express, Spring Boot, Apache, AWS Lambda, ElasticSearch, MySQL
Relevant Coursework: Data Structures, Algorithms, Linear Algebra, OOP, Intro to AI

Work Experience

Urjanet Engineering Team   *January 2022 - Current*
Software Engineering Intern
- Worked on Jira tickets for Angular frontend and Spring boot microservice backend on a bi-weekly sprint cycle
- Overhauled Hibernate/Spring Data JPA data access layer for ETL job scheduling application with no downtime
- Documented job scheduling logic with UML diagrams and wrote ERD for optimization with in memory Java cache

GhosalRE Engineering Team   *August 2021 - Current*
Full Stack Engineer, Database Administrator
- Designed MySQL database to store occupancy and listing details data for over 1k vacation rentals near Gatlinburg, TN
- Wrote Python script to transform and load scraped occupancy and listing data into AWS RDS instance
- Designed and developed REST APIs in Python Flask to expose occupancy and listing data to client-side application
- Built interactive, mobile-responsive SPA with Vue, TailwindCSS, and Vite to visualize occupancy and listing data
- Deployed Python Flask and Vue app on AWS EC2 instance running Apache web server

VMware NTICS (NSX Threat Intelligence Cloud Services) Team   *May 2021 - August 2021*
Product Development Intern
- Worked with PMs to develop APIs for customer-facing portal allowing NSX clients to research threats on NSX Manager
- Developed ingestion pipeline with AWS Lambda to gather and store threat feed data in ElasticSearch
- Built RESTful APIs through AWS API Gateway to query threat feed data stored in ES
- Demoed NTICS portal API endpoints and use cases to coworkers across 2 BUs and the UI team

VMware NSBU IDPS (Intrusion Detection and Prevention System) Team   *May 2020 – August 2020*
Product Development Intern
- Developed a file forensics solution for VMware IDPS to intercept files transferred over NSX, extending upon existing signature-based approach with support for file carving
- Updated Java Spring REST APIs and configs, added to protobuf, and built upon C++ codebase to generate rules for file extraction used by Suricata threat detection engine

Relevant Projects

Bits of Good National Nonprofit Portal Project   *June 2021 – December 2021*
Front-end Developer
- Built a web app with NextJS and MongoDB to facilitate communication between Hack4Impact chapters and nonprofits
- Developed views with ChakraUI for project tracking, landing, and maintenance pages based on Figma mockups

VMaware D&I Hub Web App (1st place winner at VMware Borathon)   *August 2020*
Full Stack Developer
- Developed a web solution to promote transparency of VMware's progress toward its diversity & inclusion goals
- Displayed front-end data visualizations in React and implemented user auth with JWTs in Node/Express
- Discussed with CFO, Zane Rowe, methods to integrate solution into VMware's current D&I initiatives