Aditya Vikram Singh

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EDUCATION

University of Massachusetts Amherst

Expected Graduation: Dec 2022

Bachelor of Science in Computer Science and Mathematics

GPA: 3.97/4.00

Distinctions: Dean's List (all semesters), Chancellor's Award Scholarship (\$14,000 annually)

Coursework: Data Structures, Algorithms, Programming Methodologies, Computer Systems, Software Engineering, Database Systems, Search Engines, Information Retrieval, Machine Learning, Data Science Algorithms

SKILLS

Languages: Python, JavaScript, TypeScript, Java

Frameworks: React, Angular, Node.js, Flask, Ruby on Rails

Cloud: AWS Lambda, SES, Azure Storage, AWS S3

Technologies: Git, Docker, PostgreSQL, MongoDB, Firebase

Work Experience

iLink Digital Inc. Software Engineer Intern Paramus, NJ May 2022 - Aug 2022

- Enhanced and refactored an organization effectiveness management dashboard built on Angular and Ionic, in a team of 4 frontend developers, by constructing generating methods for 2 large-scale UI components consuming served JSON
- \bullet Reduced server-client latency by minimizing the key-value terms by $\sim 30\%$ while maintaining lossless JSON structure
- Consulted on hybrid cloud portal for managing client Edge-computing resources, and AWS and Azure cloud resources

InnovationM Technologies Software Development Intern Noida, India Jun 2021 - Aug 2021

- Developed a grievance redress platform for internal use by 200+ employees from scratch, engineering the back-end using Node.js + Express server and modelling database layer with MongoDB through the mongoose wrapper for JavaScript
- Designed the front-end using React with Redux for state management and performed API integration of 10+ endpoints, followed by containerizing the application through Docker for easier deployment in an expansive micro-service architecture

LEADERSHIP EXPERIENCE

${\bf CICSoft} \ ({\bf github.com/umass\text{-}cicsoft}) \qquad \qquad {\bf Co\text{-}President}$

Aug 2022 - Present

- Lead 8 core members in optimizing logistics, outreach, teaching and development, coordinating with other co-president
- Supervised the development team in designing the organization's landing page, using HTML, CSS and JavaScript, and building CICapi a unified back-end for handling member logistics using Flask, Firebase and Heroku, with 170+ users

HackUMass (github.com/fuseumass) Co-Director

Mar 2022 - Present

- Direct the organizers in preparation of HackUMass X, focusing on the technology and hardware components of the event
- Overhauled HackUMass's landing website with novel functionalities and UI bug fixes, and implemented 3 new enhancements and resolved 5+ bugs in Dashboard, the event's logistics management solution on Ruby on Rails

Manning CICS

Undergraduate Course Assistant

Aug 2021 - Present

- Coordinate with the instructor to aid students taking COMPSCI 240 understand the principles of Probability Theory
- Graded homework assignments for 300+ students, provided constructive feedback to help students employ better strategies, and responded to students' questions on Piazza to clarify core concepts and resolve doubts about the course materials

PROJECTS

Project URefer (github.com/suikac/compsci-320-team-5)

Sep 2021 - Dec 2021

- Programmed server-side logic of a job referral portal using NestJS, operating in a Agile workflow with 10 team members
- Introduced React-based UI development to 4 new front-end developers, explained paradigms for API integration from Express server, and presented weekly demonstrations of product features to client

Elementary Chatbot (github.com/AVS1508/elementary_chatbot)

Jun 2021 - Aug 2021

- Built a Rasa chatbot in Python for Messenger using SpaCy NLP components as a 12-week project with Sopra Steria
- Tuned the chatbot to focus on 50+ COVID-19 specific queries and specified responses using Rasa's inbuilt interface

Perpetual Crusades (github.com/AVS1508/perpetual-crusades)

Sep 2020 - Sep 2020

- Designed a medieval-themed dice board game with 15+ role-playing elements analogous to Dungeons & Dragons
- Developed character selection menu, implemented randomized dice throw, and modeled board with real-time notifications

Interests