ANANYA DAS

Santa Cruz, California

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Education

University of California, Santa Cruz   **September 2021 - June 2023**

Master of Science in Computer Science; GPA: 3.8/4.0   *Santa Cruz, California*

Coursework: *Distributed Systems, Analysis of Algorithms, Programming Languages, Advanced Database Systems, High Performance Computing, Machine Learning, Information Retrieval*

West Bengal University of Technology   **August 2011 - June 2015**

Bachelor of Technology in Computer Science; GPA: 8.46/10   *West Bengal, India*

Coursework: *Design and Analysis of Algorithms, Database Systems, Operating Systems, Object-Oriented Programming*

Industrial Experience

University of California, Santa Cruz   **Dec 2023 – Present**

Software Engineer - Working with (Prof. Leilani Gilpin)   *Santa Cruz, California, United States*

- Leading a team of 4 on creating a tool to organize the meeting databases using the burn-down chart and importing the meeting database to **PostgreSQL** to scale the database
- Optimising the application for low latency performance by using **Redis Cache** reducing response time by 40% and load on the relational database by 30%
- Participating in the comprehensive **end-to-end development lifecycle** of the application, beginning with the initial ideation and requirement gathering phase, progressing through design, implementation, testing, and refinement, and culminating in the successful deployment and ongoing maintenance of the software solution

Metajungle LLC   **August 2023 - Nov 2023**

Software Engineer   *Ozark, Missouri(On-Site),United States*

- Worked in the front-end development team to develop the front-end of the web-application of Metajungle's NFT portal using **React** involving dynamic components and collaborated with the back-end team for seamless integration between the front-end and back-end functionalities
- Worked on taking the lead in developing a robust pipeline using (CI/CD) principles specifically tailored for **Jenkins**, facilitating the smooth and automated deployment of the web application. This involved meticulously designing and configuring the pipeline stages to encompass various tasks such as building, testing, and deploying the application.

Inovalon Inc.   **June 2022 – August 2022**

Software Engineering QA Intern   *Remote, United States*

- Worked on implementing a test suite for automation test scripts for web-based pharmacy application increasing the performance of the web-application by 30%
- Enriched the functionality of the automation framework by skillfully incorporating new modules for Rest API's
- Performed **manual** testing of the web-based pharmacy web application to understand the feasibility and scope of the automation
- I collaborated within a team that followed the **Agile Methodology**, where our primary objective was to ensure the efficient and timely delivery of the project. This involved active participation in **Agile** ceremonies such as daily **stand-up meetings, sprint planning, sprint reviews, and retrospectives**. By adhering to Agile principles such as iterative development, continuous feedback, and adaptation to changing requirements, we aimed to maintain a flexible and responsive approach throughout the project lifecycle

Shell India Markets Pvt. Ltd.   **August 2019 – August 2021**

Software Engineer - Automation Testing   *Bangalore, India*

- Developed automation tests for web and mobile-based applications in Salesforce for Regression Testing to increase the performance of the web application by 30%
- Created automation framework for **Salesforce** based application and automated end-to-end functionality and regression test cases for **DocuSign** contract creation optimizing more than 80% of test cases.
- Carried out RESTful API testing using **Postman** to test backend data flow for contract creation in DocuSign
- Developed and maintained the automation framework resulting in 40% reduction in testing time
- Configured CI/CD using Jenkins to execute automation test suites resulting in a 40% reduction in release cycles
- Worked on configuring a **selenium grid** for parallel execution of automation test suites

- Worked in an **Agile Scrum development** environment with frequently changing requirements and features set requiring an excellent understanding of the Software Development Life Cycle(SDLC) and Software Test Life Cycle(STLC)

Infosys   December 2015 – July 2019
Test Analyst   *Bhubaneswar, India*
- Developed automation test scripts for web and mobile-based **US Healthcare Insurance Product**
- Innovatively extended the capabilities of the automated **REST API testing framework** for a complex banking application by meticulously adding modular components
- Worked independently and in close collaboration with others in the team to acheive quality and ensure smooth delivery
- **Training Experience** : Developed a fully functional railway ticketing portal using prevalent web technologies during initial three months of training using **Java Springboot Framework**
- Conducted performance testing of the web application utilizing **JMeter** to ensure optimal functionality and responsiveness

Tata Consultancy Services Ltd   May 2014 – July 2014
Software Development Intern   *Kolkata, India*
- Developed **CRUD APIs** and refactored legacy code using appropriate design patterns
- Designed **database schema** and low-level system design for one microservice
- Developed responsive UIs using Vanilla Javascript, Bootstrap HTML

Projects

MS Project (Benchmarking of applications in the tidalscale software-defined server)   Jan 2022 – Mar 2022
- Worked on benchmarking the performance of real world applications **GapBS** and **MonetDB** on **Tidalscale**. The goal of the project was to understand the scalability and performance issues of these applications on Tidalscale

Comparative analysis and implementation of an LR(0) parser   Jan 2022 – Mar 2022
- Implemented the LR(0) algorithm in three different languages Java, Python, and Scala. Compared the runtime for three different grammars and sentences amongst which Java took the least time and Python the highest.

Genomic compression   April 2022 – May 2022
- Comparison of the reference free and reference based methods of genomic compression in nanopore sequencing

Survey of caching paradigms in search engines   April 2022 – May 2022
- Implement and compare caching algorithms and techniques such as LRU, LFU, MRU, FIFO over a composite search algorithm that runs on a single computer. Compared the performance of bitfunnel indexing algorithm with B+ tree indexing

Technical Skills

Languages: HTML, CSS, Java, Python, C++, C, Linux

Frameworks/Libraries: Numpy, Pandas, Selenium Webdriver, Cucumber, Maven, TestNG, RestAPI Automation

DevOps: Docker, Jenkins

Version Control: Git

Web Development: HTML, CSS, JavaScript, React(Beginner), Node.js(Beginner), Bootstrap

Databases: MySQL, SQLServer, Oracle, PostgreSQL, MongoDB

Certifications

ISTQB Agile Certified Tester   Feb 2020

ISQTB Certified Foundation Level   Jan 2020

Position of Responsibilities

Chairperson - Computer Society of India   June 2011 - Present
- Participated as a volunteer at the Computer Society of India, contributing to various initiatives aimed at promoting technology education and fostering a vibrant tech community.
- Assisted in organizing monthly tech talks and workshops, coordinating logistics, and managing attendee registrations

Volunteer - IEEE   June 2012 - July 2015
- Led the planning and execution of the annual on behalf of my university and participated in IEEE Student Conference, overseeing a team of volunteers and ensuring the seamless delivery of keynote speeches, panel discussions, and student presentations.
- Participated in local IEEE groups focused on specific demographics, such as Women in Tech