Sarath Kumar Dunga

EDUCATION

Arizona State University, Tempe, USA

Master of Science in Software Engineering

Indian Institute of Engineering Science and Technology, Shibpur, INDIA

Bachelors in Electronics and Telecommunication Engineering

PROJECTS

GistiFi: AI Summary & Code Analyzer (Chrome Extension) §

April 2025 - May 2025

July 2019 - May 2023

GPA: 3.81 / 4.00

GPA: 8.33 / 10.00

Graduating - January 2026

- Built and published a productivity-focused Chrome extension that performs Big-Oh /time-space complexity analysis on code snippets and summarizes web articles using Google Gemini API.
- Ensured CSP-compliant practices with externalized scripts, Chrome storage.sync, and safe API key handling.
- Optimized DOM parsing to achieve ~98% article content coverage and improved article extraction precision through adaptive *querySelector* fallbacks, mitigating noise from naive *innerText* scraping.

Scrum Board Simulator (SBS) Project 🔗

August 2024 - October 2024

- Led a team of 5 as Scrum Master, coordinating sprint planning and daily stand-ups, and retrospectives to achieve the fastest project milestone completions in the department.
- Achieved a **37.97**% improvement in burndown performance in sprint2 over sprint1, ensuring project delivery on time.
- Programmed core features, including user story management, resolve blockers, and probability tuning module.

Multi-threaded Load Balancer and Page Table Simulator &

March 2024 - April 2024

- Built a multi-threaded load balancer using mutexes in C, optimizing batch-based request handling for dynamic server instance allocation.
- Conceptualized a page table simulator supporting **FIFO**, **LRU**, and **MFU** page replacement algorithms, demonstrating page fault occurrences and handling memory requests.

PROFESSIONAL EXPERIENCE

Supplemental Instruction Leader | Arizona State University, Tempe, USA

August 2024 - Present

- Facilitate weekly study sessions, conduct interactive live classes, and doubt-clearing sessions for undergrad students in Data Structures and Algorithms, enhancing analytical skills and problem-breakdown abilities.
- Analyzed exam performance data from more than 100 students across courses Design and Analysis of Algorithms and Software Enterprise, identified and addressed the top three misconceptions leading to academic challenges.

Software Engineering Virtual Intern | J.P. Morgan Chase & Co. 🔗

August 2023 - September 2023

- Contributed to JPMorgan Chase's open-source library called **Perspective** to generate a live graph to display a data feed in a clear and visually appealing way for traders to monitor.
- Revamped the codebase for the Perspective library by fixing 6+ broken files ensuring seamless output of live graph.

Azure Cloud Computing Internship | Verzeo &

June 2022 - July 2022

- Leveraged Azure Cognitive Services to create a computer vision resource for the Optical Character Recognition (*OCR*), enabling automated text extraction from images and documents.
- Implemented secure credential management with Azure Key Vault, configuring access policies to protect sensitive data.

TECHNICAL SKILLS

Languages: C++, C, SQL, Java, Python React Js, JavaScript, Node.js, JavaFX

Tools and technologies: AWS, Azure Cloud Computing, MySQL, Git and Github, Postman, Astah, JIRA, JUnit **Relevant Coursework:** Cloud Computing, Advanced DSA, Operating Systems, Distributed Database Systems.

ACHIEVEMENTS

Sun Award Recipient - April 2025 LeetCode Global Rank - **485**/17169 **GAABESU** Merit Scholarship (February 2021 and April 2022) National Engineering Olympiad NEO-3.0 Rank - **494**/31500