Sarath Kumar Dunga

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EDUCATION

Arizona State University, Tempe, USA — *Graduating - January 2026*
Master of Science in Software Engineering — GPA: **3.81** / 4.00

Indian Institute of Engineering Science and Technology, Shibpur, INDIA — *July 2019 - May 2023*
Bachelors in Electronics and Telecommunication Engineering — GPA: **8.33** / 10.00

PROJECTS

GistiFi: AI Summary & Code Analyzer (Chrome Extension) — *April 2025 - May 2025*
- 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

ASU SUN Award for Exemplary Student Service
LeetCode Global Rank - **485**/17169

GAABESU Merit Scholarship (February 2021 and April 2022)
National Engineering Olympiad NEO-3.0 Rank - **494**/31500