Armanul Ambia

✉ armanul.ambia@gmail.com   🌐 portfolio/armanambia.github.io   in linkedIn/armanul-ambia   ⊙ github/armanambia

EDUCATION

B.S. Computer Science - Mathematics Minor   **GPA:** 4.0   **Expected Graduation Date:** May 2023
California State University - Fullerton

WORK EXPERIENCE

AMAZON | Software Development Engineer (SDE) Intern   **May 2022 – Aug 2022**

- Spearhead creation of **A/B testing experiments** in **Amazon Alexa's Discovery Engine**
- Create **Java Software** configuration for Alexa using **dependency injection**, **AWS cloud tools**, and **Amazon internal tools**
- Collaborate with external teams, QA engineers, project managers, and software development managers to **handle code deployment, uphold agile process, address blockers**, and prioritize tasks.
- Handle, route, and analyze **traffic from millions of customers** directly contributing to future development

SOUTHERN CALIFORNIA EDISON (SCE) | Software Engineer Intern   **May 2021 – Aug 2021**

- Address SCE's data inaccuracy due to climate change, infrastructure degradation, and commercial development
- Direct the **collection and extrapolation of 2020 data** from SCE's Photovoltaic (PV) circuits
- Coordinate **IT teams, electrical field engineers, and back-end developers** to address recorded, circuit-specific anomalies
- Develop **Python scripts using Pandas, NumPy, Matplotlib** to run numerical, percentile, and reliability analysis based on PV activity
- Formulate a ten-year solar reliability forecast and facilitating **SCE's transition to 100% renewable energy by 2045**

NASA KENNEDY SPACE CENTER (KSC) | Software Engineer Intern   **Jan 2021 – Apr 2021**

- Redesign outdated graphic engine in NE-XS division directly **impacting the launch of Artemis II in 2023**
- Maintain high standards of **readability, versatility, and data generation** on firing room displays to prepare for rocket launches
- Engineer real-time graphic engine using **open-sourced Java Swing and JavaFX libraries**
- Present working display prototypes to highlight **enhancements in display functionality, readability, speed, and efficiency**

PROJECTS

STL Complexity Analysis	Document comparison of efficiency in Vectors, Maps, Binary Trees, Linked Lists in C++
Sorting Visualizer	Visualize Bubble, Selection, Insertion, and Merge Sort Algorithms in C++ SFML library.
Personal Website	Portfolio using HTML, CSS, and JS showcasing academic and extracurricular involvement
TEDX CSUF Website	Website using HTML, CSS, and PHP for Student Organization
Running Database	Database created using Java Swing and polymorphic behavior for Cross Country Coach

LEADERSHIP

ASSOCIATION FOR COMPUTING MACHINERY (ACM) | Algo President   **Aug 2021 – Present**

- Led the **largest computer science organization** on campus including **over 1000 computer science students**
- Design and present engaging content focusing on **data structures, algorithms, and interview preparation**
- Adapt curriculum to students ranging from beginner coders to industry ready graduates

TEDX CSUF | Vice President   **Dec 2019 – Aug 2021**

- Provide creative platform for CSUF students and faculty to encourage public speaking
- Host **large-scale TEDx events** bringing together students and professionals throughout Southern California

SKILLS

Programming Languages	Python, C++, Java, GIT, HTML, CSS, JS, SQL, PHP
Libraries	Pandas, Tkinter, SciPy, Pygame, Matplotlib, NumPy, SFML C++, MySQL, Log4j, Google Guice
Development Tools	Microsoft Excel, R/ R Studio, Eclipse, Visual Studio, Linux Terminal, Systems Tool Kit, SQL Developer, AWS Lambda, AWS Cloudwatch, AWS Cloudformation, AWS EC2