ARMANUL AMBIA

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EDUCATION

California State University - Fullerton
Bachelor of Science Major in Computer Science / Minor in Mathematics   **Expected Graduation Date**: May 2023   **GPA**: 3.96

PROFESSIONAL EXPERIENCE

Amazon, Irvine, CA
Software Development Engineer (SDE) Intern   *May 2022 – August 2022*
- Developed software to enhance the customer experience in **Amazon Alexa's Discovery Engine**
- Spearheaded the creation of multiple **A/B testing experiments** to deliver new features based on gathered engagement metrics
- Created **Java Software** Configurations using **dependency injection**, **AWS Cloud tools**, and **Amazon internal tools**
- Collaborated with external teams, QA engineers, project managers, and software development managers to **run a full code deployment, uphold agile process, address blockers,** and prioritize tasks.
- Handled, routed, and analyzed **traffic from millions of customers** through Alexa skills directly contributing to future development

Southern California Edison (SCE), Pomona, CA
Software Engineer Intern   *May 2021 – August 2021*
- Addressed SCE's data inaccuracy due to climate, infrastructure, and commercial development
- Directed the **collection and extrapolation of new 2020 data** from SCE's Photovoltaic (PV) circuits
- Coordinated IT and backend data teams to address data and circuit-specific anomalies
- Developed **Python scripts using Pandas, NumPy, Matplotlib** to run numerical statistics, percentile analysis, reliability calculations, and find max PV activity
- Formulated a new ten-year solar forecast ensuring high-quality solar energy and facilitated **SCE's transition to 100% renewable energy by 2045**

NASA Kennedy Space Center (KSC), Meritt Island, FL
Software Engineer Intern   *January 2021 – April 2021*
- Developed Software in the NE-XS division that **directly impacts the launch of Artemis II in 2023**
- During rocket launches, firing room displays maintain high standards of **readability, versatility, and data generation**
- Antiquated firing room software relied on inefficient 3rd party software
- Engineered a completely redesigned graphic engine using **open-sourced Java Swing and JavaFX libraries**
- Presented my engine with working prototypes of existing displays to highlight **enhancements in display functionality, readability, speed, and efficienc**y
- **Achieved and documented a novel functioning Display Engine** for further development in preparation for Artemis

The Boeing Company, Huntington Beach, CA
High School Engineering Intern   *June 2018 – August 2018*
- **Developed a cost-effective model** for fighting California Wildfires using **Systems Tool Kit software**.
- Researched fire-fighting equipment, climate change, available resources per capita, and long–term sustainability
- Recommended a standard set of air carriers and task force sizes that project a savings of **$200,000 per year**

PROJECTS

STL Complexity Analysis	Documented comparison of efficiency in Vectors, Maps, Binary Trees, Doubly and Singly Linked Lists
Sorting Visualizer	Visualizer for studying Bubble, Selection, Insertion, and Merge Sort Algorithms in C++ SFML library.
Personal Website	Portfolio created from scratch using HTML, CSS, and JS, **armanambia.github.io**
TEDxCSUF Website	Website for student organization using HTML, CSS, JS, and PHP, **tedxcsuf.org**
Running Database	Database created with Java GUI/ Swing libraries and polymorphic behavior for Cross Country Coach

SKILLS

Programming Languages	Java, Python, C++, 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