

AUGUSTO ESCUDERO
San Diego, CA
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EDUCATION

University of San Diego

Bachelor of Science - Computer Science
Minor in Mathematics

San Diego, CA
Expected May 2025

Major GPA: 3.85 | Minor GPA: 3.84 | Cumulative GPA: 3.65

- USD Alcalá Scholarship awarded for excellence in academics and extracurricular activities
- Dean's List, First Honors Award (3.65+ GPA) for 4 consecutive semesters
- Relevant Coursework: Computational Problem Solving, Programming Abstractions and Methodologies, Intro to Computer Systems, Calculus I, Calculus II, Calculus III, Discrete Mathematics, Linear Algebra, Advanced Comp Problem Modeling, Automata Computability and Languages.
- Currently enrolled in: Algorithms, Machine Learning, Object Oriented Design.

EXPERIENCE

Google LLC

Incoming SWE Intern | Android TV

San Jose, CA
June 2024 - Aug 2024

Google LLC

STEP Intern | Google Ads

Mountain View, CA
May 2023 - Aug 2023

- SQL Script Auto-Generation for Data Analysis

- Developed a tool to auto-generate **SQL** scripts for data analysis.
- Implemented and modified data analysis functions to query data from **SQL** tables.
- Created **SQL** scripts to filter the data displayed by the analysis, based on user input.
- Added visualization using **Pyplot** for an organized data table representation.
- Embedded links to auto-generated **SQL** scripts into the analysis tables.
- Rendered the results using **Python**, **HTML**, and **CSS**

- Configuration Optimization

- Migrated configurations from a **Python** file to a structured data format, optimizing binary size.
- Developed functions to read the migrated configurations accurately.
- Implemented validation to ensure migration success.

PROJECTS

Finite Automaton and Regex Simulator

- Developed simulators in Python for **Regular Expressions** (RegEx), **Non-deterministic** (NFA), and **Deterministic Finite Automata** (DFA), including parsers to construct the respective classes.
- Integrated precise string validation by implementing advanced **automata** concepts.
- Implemented an algorithm for converting RegEx strings to **Abstract Syntax Trees (AST)**, and designed a **depth-first traversal algorithm** for converting ASTs to NFAs.
- Implemented RegEx to NFA conversion and NFA to DFA conversion.

SKILLS

Programming Languages: Python & Java (Proficient/Advanced), Basic knowledge of C, HTML, CSS and SQL.
Tools: VS Code, IntelliJ, Android Studio, Linux