

Andrea Stefano Polito

☎ 949-294-9168 | ✉ astefanopolito@gmail.com | 🏠 astefanopolito.github.io

Education

University of California, Irvine

Bachelor of Science in Computer Science

Irvine

Sep. 2019 - Jun. 2023

Technical Skills

Programming: Java, Javascript, Python, BASH, C

Operating Systems: Windows, Linux

Spoken Languages: English (Native), Spanish (Fluent)

Capstone Project

Fabflix

Description

- Ecommerce website where users can purchase movies from a large database
- Supports sorting, searching, and filtering by various criteria using RESTful API
- Created using Java, Javascript, MySQL, and AWS

Optimization

- Implemented load balancing across three EC2 instances to improve throughput of requests
- Enabled Tomcat Connection Pooling for improved performance of MySQL connections

Security

- Established MySQL Database Replication to ensure consistency between instances and data redundancy
- Used Prepared Statements exclusively to prevent SQL Injection attacks
- Encrypted user passwords in database to improve security of user data

Relevant Coursework

Crux Compiler

Java

- Implemented a 5 stage compiler for the language "Crux"
- Used parsing, abstract syntax trees, symbol tables, and code generation to convert human readable code to executable assembly instructions
- Supported int and bool types, for loops, and if-then statements

Information Retrieval

Python

- Learned different techniques for storing and indexing mass amounts of data scrubbed from the internet
- Created basic search engine built on an inverted index of tokens for string queries

Experience

University of California, Irvine

Lab Tutor

Irvine

Sep. 2021 - Nov. 2021

- Served as a dedicated lab tutor in the Information and Computer Science Tutoring program
- Learned to communicate multiple coding concepts and workflows to students

Awards and Honors

Sep. 2019-2022

Scholarship: "Regents Scholarship "

UCI