**Jacques Fracchia**

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**OBJECTIVE**

Seeking a Software Engineering position with Dropbox.

**EDUCATION**

University of California, Riverside June 2020

**Bachelor of Science, Computer Science**  3.56 GPA San Jose City College

**Associates of Science, Mathematics** June 2017

**TECHNICAL SKILLS**

* Thrives working in a fast-paced dynamic team environment
* Excellent interpersonal and communication skills
* Strong analytical skills

Languages Proficient: C/C++, Java, JavaScript

Languages Known: Python, HTML5, CSS, PostgreSQL

**RELEVENT COURSE WORK**

Software Construction, Intro to Software Engineering, Software Testing and Verification, Database Management System

**RESEARCH EXPERIENCE**

Research Assistant – Dr. Josh Viers December 2017 - August 2018

* Constructed lecture slides and class notes and resources for Engineering 180 Spatial Analysis and Modeling.
* Wrote detailed guides to instruct new students how to use ESRI’s ArcGIS Pro and ArcMap software.

Spatial Analyst, VICE Labs December 2017 – August 2018

* Lab assistant for hydrologic monitoring and modeling for management and restoration analysis.
* Surveyed Merced Vernal Pools and Grassland Reserve topography and hydrology using drones equipped with LiDAR and multi-spectral imagery.
* Using post processing tools in pix4D mapper, models were constructed of the surveyed areas to calculate the land’s vegetation to monitor water movement from different watersheds.
* Designed a process to automate the downloading of sentinel and Landsat imagery over studied areas. JavaScript functions were used to process the imagery in Google Earth Engine to graph out the vegetation index over multiple watersheds from the last 10 years. The graphs produced verified the lab’s imagery was accurate by having a variance of only 8.2%.

**COMPUTER SCIENCE PROJECTS**

Software Verification and Analysis (Current) UC Riverside – Winter 2020

* Thoroughly testing an open-source GitHub project with Junit tests to search for bugs, create reports and to contribute pull requests to the project developer.

R’Budget - www.rbudget.xyz. UC Riverside - Fall 2019

* This is a web application that tracks your monthly expenses and overall budget. The backend was built using Google’s Cloud Firestore and the front end was written in JavaScript, HTML and CSS.

Hotel Database Management System UC Riverside – Fall 2019

* Given a customer’s hotel database specifications, a program was designed from a relational model, created with PostgreSQL queries and tables, and finalized with a java program for the user to make queries to the database.

Spelling Game – Embedded Systems UC Riverside – Spring 2019

* Programmed on an ATMega1284 microcontroller in C, utilized a LED Matrix, LCD screen, joystick and buttons.

Escape Room UC Riverside – Spring 2019

* A virtual reality game built in Unity and programmed in C#, where a player is trapped in a medieval castle and must solve three different puzzles to escape.

**REFERENCES**

* Dr. Joshua Viers – Engineering Professor – [jviers@ucmerced.edu](mailto:jviers@ucmerced.edu) - (209) 591-8423
* Anna Rallings – Associate Researcher and Lab Manager - [arallings@ucmerced.edu](mailto:arallings@ucmerced.edu)
* Anna Fryjoff-Hung – GIS Specialist - [afryjoff-hung@ucmerced.edu](mailto:afryjoff-hung@ucmerced.edu)