JACOB CASTANEDA

Stanford, Ca · jjcast@stanford.edu · (951) 265-0563 · jacobjcastaneda.github.io/

EDUCATION

Stanford University

Stanford, Ca PhD Environmental Fluid Mechanics Sep 2020 - Current

Stanford University

Stanford, Ca MS Environmental Fluid Mechanics Sep 2019 - Mar 2021

California Polytechnic State University- Pomona

Pomona, Ca BS Civil Engineering Sep 2015 - Dec 2018

EXPERIENCE

Resource Management Associates

Aug 2020 - Current Junior Water Resource Engineer

• Developed Python scripts to import water data for modeling efforts in SF Bay

- Collaborated with peers to develop data cleaning tools for Water Data Library Data
- Utilized USACE DSS tool and QGIS

JLC Engineering & Consulting

Design Engineer

Murrieta, Ca Jun 2018 - Sep 2019

Walnut Creek, Ca

- Performed Hydrologic and Hydraulic Analysis for Land Development Projects
- Drafted Exhibits for various projects, namely Storm Drain Plans
- Implemented Basin Design by considering Basin storage and Sediment Transport
- Utilized various engineering software, primarily HEC-RAS and LA County WSPG

SKILLS

Programming: Python, C++, C, MATLAB

Drafting & Analytical Software: AutoCAD (Civil3D), HEC-HMS, CivilD, HEC-RAS, WSPG

Projects

Lost Canyons Residential Community (2018-2019)

Performed a hydrologic/hydraulic analysis of the site. Subsequently designed drainage infrastructure and basins to comply with county/city criteria. I managed the project, coordinated with the primary consultant, and carried out the analysis for the project. The project tasks were completed within budget.

AWARDS & CERTIFICATIONS

Valedictorian of Civil Engineering

California Polytechnic State University- Pomona

Recognized for obtaining the highest GPA in my degree program.

Dec 2018

Certificate No: 4362954

Part 107 Airman Certificate