DAVID JUSTO

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EDUCATION

UCSD | B.S in Computer Science | Expected graduation date: June 2018 | GPA: 3.62

UCSD | M.S in Computer Science | Expected graduation date: Fall 2019 | GPA: TBD

WORK EXPERIENCE

INTUIT | DATA SCIENCE INTERN *June to September 2017*

Worked at Intuit's "Innovation and Advanced Technology" (IAT) division on the "Tax Knowledge Engine" (TKE) project

- Designed Genetic Programming models that learned the interactions between IRS forms to automatically extract explicit rule-sets that are able to fill numerous tax forms automatically with only a small set of inputs.
- Built and deployed database utilities to help generate training sets of our machine learning systems which enabled previously-impossible edge cases to be tested against and learned by our systems.

UCSD CSE / COGS DEPARTMENT | TUTOR / INSTRUCTOR ASSISTANT *Winter 2016 - Spring 2018*

Provided one-on-one personal assistance on the design and completion of programming assignments for the Computer Science and Cognitive Science departments at UCSD. I have experience working with students of all skill levels.

- Designed instruction materials alongside TAs and have led portions of the discussion section.
- Have contributed to: CSE8A/B (Java and OOP), CSE12 and CSE100 (Data Structures), CSE130 (Programming Languages), COGS108 (Data Science)

PANAFOLD | SOFTWARE ENGINEERING INTERN *June to September 2016*

Interned at Panafold, a web company with a focus on online team collaboration and content discovery.

- Reduced rendering times of Panafold's web application through server-side rendering and React.js
- Ported their webapp to a native desktop application using Electron
- Simplified various aspects of their server's API design to eliminate high dependency between API endpoints.

RESEARCH EXPERIENCE

MACHINE LEARNING, PERCEPTION AND COGNITION LAB | RESEARCH ASSISTANT *January 2016 to May 2018*

Assisted professor Zhuowen Tu on two research projects: (1) the development of an autonomous flying drone and (2) a new framework for multi-modal learning between text and music.

- Used Gazebo and ROS to implement a virtual drone simulation and gather training training data with it
- Implemented generative models for music-synthesis conditioned on a textual description of the expected output

SAN DIEGO SUPERCOMPUTER CENTER | RESEARCH ASSISTANT *January 2015 to February 2016*

Worked at the San Diego Supercomputer Center on optimizing a recommender system under prof. Julian McAuley

- Automated the parameter validation process of an LDA-based topic model using Python, numpy and Pandas
- Designed Scientific workflows for topic modeling of data in Kepler

LEADERSHIP

DS3 - DATA SCIENCE STUDENT SOCIETY AT UCSD | PRESIDENT *Winter 2014 to May 2018*

Managed and supervised all aspects of UC San Diego's Data Science and Machine Learning student organization: DS3.

- Organized, designed and hosted workshops on Machine Learning topics for novice to intermediate-skilled audiences.
- Provided aid, guidance, networking opportunities and other resources to students trying to get started in the field

SKILLS AND TOOLS

DATA: Python, Pytorch, Tensorflow, Pandas, Numpy, Statsmodels, Seaborn, Cython, SciPy, Lasagne| **ANDROID:** Java, Firebase, Google Play Services, GCM, JUnit **GENERAL**: C++, C, Assembly | **DATABASES:** MongoDB, SQL | **WEB:** HTML, CSS, JavaScript, ReactJS, Electron, Node.JS **WORKFLOW:** Design Patterns, Design by Contract, Agile Software Process, Jira, Git, Object Oriented Design, TDD