

JOSHUA W. ANDERSON

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Pittsburgh, PA

EDUCATION

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|------------|--|----------|
| PhD | University of Pittsburgh, Intelligent Systems School of Computing and Information Advisor: Dr. Shandong Wu | Present |
| MS | Chapman University, Computational and Data Sciences Schmid College of Science and Technology Advisor: Dr. Erik Linstead | May 2022 |
| BS | Chapman University, Computer Science Dale E. and Sarah Ann Fowler School of Engineering Double Minor in Analytics and Game Development | May 2020 |

RESEARCH EXPERIENCE

Master's Thesis, Chapman University Aug. 2021 to May 2022
Graduate Research, Dr. Erik Linstead

- Study and research modern causal inference methods
- Work with faculty and collaborate with students
- Develop R library containing tools for causal inference including G-estimation, standardization, IP weighting, propensity scores, instrumental variables, and more

Vulnerability Mapping Lab, Chapman University Aug. 2020 to Aug. 2022
Graduate Research Assistant, Dr. Jonathan Hersh

- Developed data pipeline to grab data from multiple sources, clean data and push to Amazon S3 buckets
- Cleaned and topic modeled OpenStreetMap buildings to maximize the number of known schools and clinics in sub-Saharan Africa
- Managed an undergraduate research assistant

MLAT Lab, Chapman University Feb. 2019 to May 2019
Undergraduate Research Assistant, Dr. LouAnne Boyd

- Assisted in development of a virtual reality game to positively assist in social interaction for children on the autism spectrum
- Developed data processing algorithm and debugged networking code for data collection to observe user activity
- Collaborated with other undergraduate students for game design

PROFESSIONAL EXPERIENCE

Chapman University, Orange, CA Aug. 2021 to May 2022

Data Structures & Algorithms Graduate Teaching Assistant

- Assist in grading assignments throughout the semester
- Hold TA sessions to review course content and help with questions about lectures
- Be available to students as a resource via email and slack

Chapman University, Orange, CA Aug. 2020 to Dec. 2020

Statistical Models for Business Graduate Teaching Assistant

- Graded problem sets and provide quality feedback to students
- Attended classes to help students get the most out of zoom lectures
- Held office hours to provide homework help and reinforce concepts from lecture

CISOSHARE, San Juan Capistrano, CA Mar. 2019 to Aug. 2019

Applications Development & Vulnerability Analyst Intern

- Applied cybersecurity concepts such as security architecture & disaster recovery
- Built and debugged a web application using the javascript library, React
- Interfaced with NoSQL databases with a web application using RethinkDB

Ingram Micro, Irvine, CA Jun. 2018 to Aug. 2018

Data Analytics Intern, Internal Audit

- Created and ran a SQL query to acquire data accurately and efficiently
- Output tables containing exceptions or significant values through queries
- Fully automated analytics project by configuring project on a server-based application

Oxford Tutoring, Irvine, CA Feb. 2017 to Jul. 2017

Computer Science & Mathematics Tutor

- Spent time with AP Computer Science students to prepare them for coursework and the AP exam
- Taught mathematics to grade school students to assist them in accelerating their education
- Debugged and walked through student projects to help them learn to generally code

LEADERSHIP

Data Analytics Association, Chapman University Nov. 2019 to May 2022

Internal VP & President

- Assisted in founding the club in 2019 with two other students
- Research and organize guest speakers competitions for the club to compete
- Meet with the executive board to make organizational decisions and plan meetings

RELEVANT/RECENT COURSEWORK

Completed: Applied Methods in Mathematics, Data Mining, Time Series Analysis, Multivariate Data Analysis, Mathematical Modeling, Advanced Linear Algebra & Digital Signal Processing

In Progress: Foundations of AI, Foundations of Biomedical Informatics, Statistical Methods

PROGRAMMING SKILLS

Experienced: R, Python, SQL

Familiar: C++, React.js, C#, Java/Android

Software: Unix, Git, Android Studio, Unity, Unreal 4, Visual Studio, R Studio, Anaconda