JOSHUA W. ANDERSON

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EDUCATION

PhD	University of Pittsburgh, Intelligent Systems School of Computing and Information Advisor: Dr. Shandong Wu	May 2026
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

In Progress: Natural Language Processing, Advanced Linear Algebra & Digital Signal Processing

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