Austen Nelson

ajn6@pdx.edu — (971) 806-9229 — aujxn.dev — Software Engineer / Data Scientist

Education

Portland State University — BCS

Bachelor of Computer Science — 2018-2021 — Magna cum laude, 3.8

Experience

Self Employed | 2014 − 2017 | Math and Science Tutor

Tutored calculus to engineering students.

Portland State University | 2019 − 2021 | Technical Course Support Specialist

Karla Fant teaches the core lower division computer science courses (CS162, CS163, CS202)

- Facilitated homework recitation and labs by presenting weekly materials and answering questions
- Worked the tutor desk where I debuged student homework code and helped prepare for exams
- Proctored programming proficiency demos and written exams
- Created course materials
- Helped with grading and administrative tasks

Undergraduate Research Mentorship Program | 2019 − 2020 | Panayot Vassilevski

Received a 4 term academic stipend to pursue independent research with the help of a faculty advisor. My research project worked with recipe data to create ingredient networks. These networks were analyzed as communities using modularity algorithms. Using this community data, we developed and implemented and algorithm to create original recipes based on certain constraints. The project involved meeting with my adviser, Panayot, weekly and giving write-ups or presentation to the program manager. (Project Links: Paper, Code) (Panayot Links: Google Scholar, PSU, LLNL)

Capstone Project Team Lead 2021

Selected by university staff to lead a team for the capstone graduation requirement. Our capstone project was to develop university level codelab exercises to teach concepts about cloud security and incident management through topics like IAM policies and iterative log querying. (presentation video, project plan, git repo, website)

Monte Carlo Simulation of Card Game Statistics 2019

Program that performs a MCS for a few complex statistics about special scenarios in the game Set. Set is a simple card game that demonstrates neat and complex emergence. Included in the repository is a full written analysis of the results.

Skills

Rust, SQL, C, C++ 98, Python, Git, Linux, Docker, GCP, AWS, AI/ML, Statistics, Linear Algebra, Sparse Matrices