

Stefan Nelson

ANALYST · PROBLEM SOLVER · EDUCATOR

✉ stefanwnelson@gmail.com | 🏠 stefannelson.github.io | 📷 stefannelson | 📱 stefanwnelson

Education

Minnesota State University Moorhead (MSUM)

Moorhead, MN

BACHELOR OF SCIENCE IN **COMPUTATIONAL MATHEMATICS** - SUMMA CUM LAUDE

August 2014 - May 2018

- Minors in **Statistics** and **Astronomy**.
- Selected Coursework: Data Structures, Numerical Analysis, Statistics, Computational Physics, Linux Programming/Development Tools.

Selected Work Experience

Coconino Community College

Flagstaff, AZ

DEVELOPMENTAL MATHEMATICS FACULTY

August 2019 - Present

- Fall 2019 - Instructor of record for two sections of MAT 091: Beginning Algebra.
- Spring 2020 - One section of MAT 097: Intermediate Algebra and one in-class/remote hybrid section of MAT 091: Beginning Algebra.

Americorps VISTA, W.F. Killip Elementary School

Flagstaff, AZ

STEM EDUCATION INTEGRATOR

April 2019 - Present

- Coordinating three after-school programs for Killip Elementary School that empower unrepresented student populations - Girls Teaching Girls, Evergreens (sustainability green team), and Astronomy Club. This includes direct instruction, developing curriculum, and volunteer recruitment/training from sources such as Northern Arizona University (NAU) graduate programs and the City of Flagstaff.
- Developing lesson plans for fourth and fifth grade introduction to Discrete Mathematics and Combinatorics topics in addition to district-wide professional development for Python classroom integration with Google Colaboratory.
- Collaborated to procure grants (over \$45,000) from the Arizona Community Foundation (x2) and Arizona Public Service Electric to build capacity for STEM Lab and Killip at large. Utilized DecisionED's Data Warehouse and Killip staff to compile a comprehensive digital portfolio to get Cognia STEM Certification.
- Coordinating the first annual Night of Code event with community volunteers from Coconino Community College, W.L. Gore and Associates, NAU's Arduino Club, etc. to connect students and computer science professionals.

Department of Mathematics, Northern Arizona University

Flagstaff, AZ

INSTRUCTOR

August 2018 - December 2018

- Instructor of record for two sections of MAT 114: Quantitative Reasoning (≈ 72 students).

Peak Performance Bridge Program, Northern Arizona University

Flagstaff, AZ

GRADUATE TEAM SUPPORT

May 2018 - August 2018

- Performed administrative tasks on Blackboard and MyLabsPlus in a remote setting for 6 math coaches to tutor incoming freshmen (≈ 72 total) on placement test topics. Tasks included payroll, providing feedback for tutoring sessions via email and video conference calls, and implementing student assignments.
- Tutored 7 low-income and/or first generation college bound students with the Upward Bound program using ALEKS.

Department of Mathematics, Iowa State University

Ames, IA

RESEARCH EXPERIENCE FOR UNDERGRADUATES (REU) INTERNSHIP

June 2017 - August 2017

- Worked with the Modeling and Computation group to research/implement new methods to model shockwaves using partial differential equations.
- Implemented limiters using Python and presented results at the International Linear Algebra Society Conference (2017), the Joint Mathematics Meetings (2018), and MSUM's Student Academic Conference (2018). Paper in editing process to be submitted to the *Advances in Computational Mathematics* Journal (see <https://arxiv.org/abs/1806.06756>).

Technical Skills

- Python, R, C++
- Kanban project management with Trello
- Public speaking using Microsoft and Beamer presentation software
- Version control with git
- GNU/Linux
- Data Management/visualization using numpy, pandas, matplotlib, seaborn, and tidyverse packages