# **Nathan Taylor**

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#### **EDUCATION**

University of Oregon-Eugene, Oregon

September 2017 - June 2019

M.S. Mathematics

University of Montana-Missoula, Montana

August 2014-May 2017

M.A. Mathematics

University of California-Santa Cruz, California

September 2007-March 2011

B.A. Mathematics

#### **SKILLS**

# Python

- · Skilled at Python programming, and solving problems using Python.
  - · Contributed to the sympy project (a computer algebra system written in Python) by writing a test for one of their differential equation solvers.
  - · I made a Flask app that helps organize photos into different categories using a SQLite database. I'm working on incorporating machine learning into the app so that photos can be categorized automatically.

#### Bash

- · Proficient in Bash scripting. Here are some examples of Bash scripts I have recently written:
  - · A script which backs up the home directory, gives the copied directory a name including the current time, then deletes the oldest previously backed up directory.
  - · A program which compares files with the same name in two different directories, and lets the user update one of the copies if desired.
  - · Scripts to speed up installing Arch linux. The scripts walk the user through the installation process, asking questions when it needs input. Each line in the script output is a different color.
  - · A program which displays a simple menu to help transfer themes from one Linux distribution to another.

# $\mathbf{SQL}$

- · Familiar with the SQL database language:
  - · Used SQLite to store and query user data in Flask applications.
  - · Used MySQL and Python to query and graph data from the Social Security Administration's baby names database.

# C++ / Arduino / Raspberry Pi

- · Designed and programmed an Arduino circuit to regulate air/fuel ratio in a 1985 Nissan Pickup. The Arduino circuit replaced the old computer, increasing highway fuel economy from 12 mpg (with no functioning computer) to 22 mpg.

  · I set up a Raspberry Pi as a web server on my local network.

#### Other

· Other tools I'm familiar with: Git, LaTeX, Linux (installing and configuring), Flask web framework, HTML, CSS, JavaScript, and the C++ language.

## RELEVANT COURSES

# Harvard University/edX-Online

Completed April, 2020

 $\cdot$  CS50: Introduction to Computer Science

## Coursera-Online Courses

Completed April/June, 2020

- · Introduction to TensorFlow for Artificial Intelligence, Machine Learning, and Deep Learning
- · Databases and SQL for Data Science
- $\cdot$  Python for Data Science and AI
- · Data Science Methodology
- · What is Data Science?

## HackerRank Skill Certificates

Completed May, 2020

- · Problem Solving (Basic)
- · Problem Solving (Intermediate)
- · Python (Basic)

# Lane Community College

Completed August 2019

· Introduction to Computer Networks (CS 179)

## RELEVANT WORK EXPERIENCE

# University of Oregon

September 2017-August 2019

Graduate Employee

- · Courses Taught:
  - · Math 111 (College Algebra): Fall 2017, Winter 2018.
  - · Math 112 (Trigonometry): Spring 2018, Fall 2018.
  - · Math 107 (University Math 3): Summer 2018.
  - · Math 241 (Business Calculus): Spring 2019.
  - · Math 106 (University Math 2): Summer 2019.
- · Courses as a Teaching Assistant:
  - $\cdot$  Math 241 (Business Calculus): Winter 2019.

## University of Montana

August 2015-May 2017

- Teaching Assistant
- · Courses Taught:
  - $\cdot$  Math 121 (College Algebra): Summer 2016, Spring 2017.
- · Courses as a Teaching Assistant:
  - · Math 115 (Probability and Linear Math): Fall 2015, Spring 2016.
  - $\cdot$  Math 162 (Applied Calculus): Fall 2016.

## PERSONAL TRAITS

Highly motivated and eager to learn new things and to solve problems.

Adaptable to different situations and responsibilities.

Hard-working, perseverant, and dependable.