

Nathan Taylor

<https://pecan-pine.github.io>
pecan.pine@gmail.com

EDUCATION

University of Oregon—Eugene, Oregon

M.S. Mathematics

September 2017 - June 2019

University of Montana—Missoula, Montana

M.A. Mathematics

August 2014-May 2017

University of California—Santa Cruz, California

B.A. Mathematics

September 2007-March 2011

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.

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

- 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
- 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:
 - Math 241 (Business Calculus): Winter 2019.

University of Montana

August 2015-May 2017

Teaching Assistant

- Courses Taught:
 - Math 121 (College Algebra): Summer 2016, Spring 2017.
- Courses as a Teaching Assistant:
 - Math 115 (Probability and Linear Math): Fall 2015, Spring 2016.
 - 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.