

Porter Glines

208-380-2898 | porterglines@gmail.com

Master of computer science graduate with an emphasis on machine learning. Being diligent in my work and dedicated to treating software engineering as a craft led me to graduate top of my class and receive an outstanding graduate student award. Well-versed in Python, Rust, Swift, and JavaScript.

Education

Master of Computer Science • Idaho State University

May 2022 • Pocatello, ID

- 4.0 GPA, Phi Kappa Phi
- Outstanding Graduate Student 2021-2022
- Graduate Teaching Assistantship 2020-2021 and 2021-2022

Bachelor of Computer Science • Idaho State University

Dec 2019 • Pocatello, ID

- 3.6 GPA Graduated *cum laude* with a minor in *Mathematics*

Experience

Research and Teaching Assistant • Idaho State University

Oct 2019 - May 2022 • Pocatello, ID

- Collaborated on generative machine learning models in *Python* and *Rust* which led to **4 peer-reviewed publications**
- Spearheaded research projects resulting in ISU establishing a place at the *International Conference on Computational Creativity* (ICCC) as well as a local conference (i-ETC)
- Tutored and graded 186 students in upper-division/graduate courses including **Computational Theory, Advanced Algorithms, Computational Creativity, and Machine Learning**

IT Student Supervisor • Idaho State University

Sep 2016 - Oct 2019 • Pocatello, ID

- Updated PowerShell scripts to facilitate labs' transition to Windows 10
- Successfully managed and resolved IT issues for staff and faculty, demonstrating strong **problem-solving** and **troubleshooting skills**
- Implemented training programs, resulting in improved technical expertise of technicians

Projects (hosted on GitHub)

Thoughts: Mind Map Generating Web App using GPT-4

- Automatically generate mind maps using OpenAI's GPT-4 function calling API
- Organize and manipulate nodes with a performant node-based editor
- Written in *TypeScript* using *React*, *Node.js*, *Express.js*, and *MongoDB*

Constrained Hidden Markov Model (Thesis)

- Generated musical sequences styled after Bach chorales
- Results compared favorably against an Anticipation-RNN (Recurrent Neural Network)
- Written for performance in *Rust* with an 85% test coverage (unit tests)

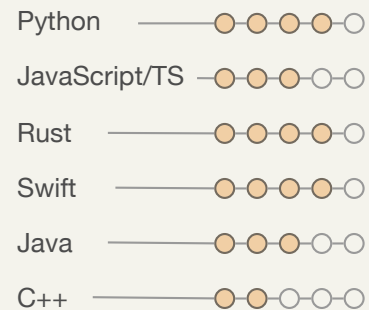
Skills

Machine Learning • React • Node.js • Express.js • MongoDB • RESTful APIs
• GraphQL • Docker • Kubernetes • PyTorch • Keras • HuggingFace APIs • Transformers • Recurrent Neural Networks (RNNs) • iOS Development • SwiftUI
• UIKit • CoreData • Agile / Scrum • Clean Code • Test-Driven Development
• CI/CD • SQL • Unix command line

Links

github.com/po-gl
linkedin.com/in/porter-glines
porterglines.com

Languages



Relevant Coursework

Computational Theory
Advanced Algorithms
Machine Learning
Data Science
Software Testing
Empirical Software Engineering
Database Design and Implementation