# Porter Glines

208-380-2898 | porterglines@gmail.com

#### Education

May 2022

#### Masters of Computer Science | Idaho State University

- 4.0 GPA, Phi Kappa Phi
- Thesis: Imposing Structure on Generated Sequences: Constrained Hidden Markov Processes
- Graduate Teaching Assistantship Grant 2020-2022
- Outstanding Graduate Student 2021-2022
- Related coursework: Computational Theory, Software Testing, Empirical Software Engineering, Advanced Algorithms, Machine Learning, Compilers, Operating Systems, Systems Analysis and Design

Dec 2019

#### Bachelor of Computer Science | Idaho State University

Graduated cum laude with a minor in Mathematics

## Experience

Fall 2019 -May 2022

#### Research and Teaching Assistant | Idaho State University

Research and teaching assistant to Dr. Paul Bodily for multiple courses including: Computational Theory and Machine Learning. Tutored for upper-division and graduate level courses.

Sept 2016 -Oct 2019

#### IT Student Supervisor I Idaho State University

Supervised and trained IT Support Technicians at ISU and retained an in-depth knowledge of Windows and MacOS to support users across the entire campus.

Projects (hosted on GitHub)

#### Constrained Hidden Markov Model (Master's Thesis)

Written in **Rust** with high test coverage. Performance is **10x** over a previous python implementation. **Generated musical sequences** styled after Bach's Chorales. Generated music compared favorably against an Anticipation-RNN (neural network) in an **IRB-approved survey**.

#### Mnemonic Device Generator using a constrained Markov chain

C++ multi-threaded program generating mnemonic devices and communicating through IPC to a Django server that serves a frontend. Presented this project at ICCC's 2019 conference in North Carolina.

#### **Publications**

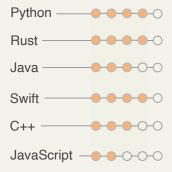
- Glines, P., Griffith, I., & Bodily, P. M. (2021). Software Design Patterns of Computational Creativity: a Systematic Mapping Study. *Proceedings of the 12th International Conference on Computational Creativity*, pages 218-221.
- Glines, P., Biggs, B., & Bodily, P. M. (2020). A Leap of Creativity: From Systems that Generalize to Systems that Filter. *Proceedings of the 11th International Conference on Computational Creativity*, pages 297-302.
- Glines, P., Biggs, B., & Bodily, P. M. (2020). Probabilistic Generation of Sequences Under Constraints. *Proceedings of the 1st Intermountain Engineering, Technology, and Computing Conference*, pages 135-140.
- Bodily, P. M., Glines, P., & Biggs, B. (2019). "She Offered No Argument": Constrained Probabilistic Modeling for Mnemonic Device Generation. Proceedings of the 10th International Conference on Computational Creativity, pages 81-88.

#### Fields of Interest

#### Personal Information

- 208-380-2898
- porterglines@gmail.com
- https://github.com/po-gl
- porterglines.com

#### Languages



### Skills / Familiar With

- Scrum
- Clean Code
- Test-driven Development
- Vim
- UNIX command-line
- Microsoft PowerShell
- BASH Scripting
- Windows Operating system and deployment tools
- MacOS
- SQL
- LATEX
- Academic Conference Reviewing