Caleb Laarz Geiger

O: https://github.com/ElodinLaarz

in: https://www.linkedin.com/in/caleb-geiger/

Citizenship: USA

➡: caleblgeiger@gmail.com➡: https://calebgeiger.org➡: Tehachapi, CA (Open to relocation)

TECHNICAL SKILLS

- **Fluent in:** Python, C++
- Prior projects using: keras, numpy, pandas, pytorch, sage, scikit-learn, tensor-flow

SELECT PERSONAL PROJECTS

- **HanabiAI**: A machine-learning project to teach a neural-network to play the card game *Hanabi*. See https://github.com/ElodinLaarz/HanabiAI.
- **KevinCoin**: An implementation of a cryptocurrency from first-principles implemented in C++ and Rust. See https://github.com/ElodinLaarz/KevinCoin

EXPERIENCE

University of Washington

Researcher in Computational Number Theory

Seattle, WA

Sep. 2014 — Jun. 2019

- Overview: Thesis research centered around creating and implementing algorithms in number theory. Created
 polynomial-time algorithms for computing invariants where existing methods where computationally infeasible
 or non-existent.
- **Technical skills used**: Implemented algorithms using thousands of lines of Python. Invariants were computed in parallel on a 24-core server and stored in a PostgreSQL database.
- Link to thesis: https://kevinlui.org/pages/thesis

EDUCATION

• University of Washington, Seattle

M.S. in Mathematics specializing in Number Theory

Seattle, WA

Sep. 2015 — Jun. 2020

• University of California, Irvine

Bachelors in Mathematics

Irvine, CA Sep. 2013 — Jun. 2015