Devon Loehr

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Education

- **Swarthmore College** — Swarthmore, PA
  Major in Computer Science and Mathematics; GPA: 4.00 — *Sep. 2014 – May. 2018*
  - **Relevant Courses**: Stuff

Experience

- **GrammaTech, Inc.** — Ithaca, NY
  Summer intern — *Summer 2015, Summer 2016*
  - **Legacy Code Translation**: Translated old code from Scheme into C++ over two summers, resulting in significant performance increases
  - **Test Creation**: During the above translation process, created several unit and regression tests for each module. Tests did not previously exist for this portion of code.
- **Static Analysis Research** — Swarthmore, PA
  Student researcher — *Summer 2017*
  - **Python research**: Spent several weeks determining the underlying semantics of the CPython interpreter. Created program to translate Python code to equivalent, simpler code.
  - **Lamia language**: Created functional language to model Python behavior. Translated simplified Python code into this language for analysis.
  - **CoPylot**: Created program to analyze Lamia by embedding the code into a PDS and performing reachability analysis.
- **Independent Consulting**
  Developer — *Various*
  - **Fractal Programs**: Recreated several old fractal programs from scratch so they could be used on modern computers.
- **Extracurriculars**
  Various — *2016-2018*
  - **Swarthmore LARP Committee**: Created and hosted a large (100 person) LARP for Swarthmore students along with a committee of around 10 people.
  - **Regent of PsiPhi**: One of three leaders of the Swarthmore Sci-Fi club. Recruited many new members, and led creation of an all-campus Halloween LARPing event.

Projects

- **Complex Paint**: A program for visualizing complex functions, and iterating those functions with various seeds
- **FractaSketch**: A program to create fractal images by repeated iteration based on a fractal template.
- **CoPylot**: Static analysis tool for Python to determine possible types of variables at arbitrary locations in the code.