# Troy Liebel

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### Education

2013–2017 **BS, Computer Science**, *University at Buffalo*, Provost Scholarship.

- o Operating Systems Implemented Linux Kernel operations, structures, and syscalls, C:
  - synchronization primitives (locks, semaphores, condition variables).
  - file system interface (file handle structure, open, close, read, write, Iseek).
  - process and multiprocess support (process structure, fork, execv, waitpid).
  - virtual memory (page structure and allocation, address translation, TLB management).
  - additional details at ops-class.org.
- Software Quality in Practice hands on with programming tools and techniques, C, Java:
  - in-depth use of git in multiple team environments and how git functions at a low level.
  - exposure to tools for debugging, testing, memory management, and code coverage.
- Other notable courses: Software Engineering, Modern Networking, Machine Learning, Data Intensive Computing, Programming Languages, Algorithms, Data Structures.

## Work Experience

2016–2017 Computer Science Teaching Assistant, University at Buffalo.

- CSE 442 Software Engineering, Fall 2016:
  - simulated an **Agile/Scrum** work environment via weekly meetings and sprints for multiple teams of students as they developed a product for the entirety of the semester.
  - enforced **git** best practices and branching habits for all teams and members.
  - assisted teams in finding useful frameworks, services, and tools.
  - helped with team dynamics and relationships in difficult situations.
- CSE 115 Intro to Computer Science, *Spring 2017 Java*, **Python**:
  - introduced students to **object oriented programming** concepts in weekly lab sessions.
  - hosted weekly **Python** tutorials to highlight how to teach oneself a new language and an introduction to **Unix command line** and **Vim** to prepare students for the future.

Oct 2014- Advanced Repair Agent, Geek Squad, Best Buy.

Present Achieved Quarterly MVP and Employee of the Month on multiple occasions, Work with a small team of other repair agents to handle repairs of all the client computers, Communicate directly with clients about the status of their repair, Platinum Certification.

### Projects

Nov 2016 **UB Hacking Finalist**, Spinbot, **C**, Python.

Persistence of vision display created from recycled optical drives, LED's and Arduinos, support for live message updates via a custom Slack integration and bluetooth.

## Languages, Tools, and Skills

Fluent C/C++, Python, Java, Git, Atom, OOP, Linux Development Environment, Windows.

Familiar Numpy/Scipy, GoLang, R, Bash, yaml, Erlang, Hadoop, Vim, Eclipse, Wireshark.

#### Miscellaneous

2010–2013 Ski Instructor, Holiday Valley, Ellicottville, NY.

Level I Alpine Certification with the Professional Ski Instructors of America, instructed students of varying skill levels in group and private sessions, mentored junior instructors.