

Anders Lewis

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Education:

- Undergraduate at the University of California, Berkeley
- BA in Computer Science, minor in Music.
- Expected graduation in May 2018; 3.4 GPA
- Courses in progress: Machine Learning, Computer Graphics, Upper Division Linear Algebra
- Courses completed: Operating Systems, Probability and Random Processes, Robotics, Artificial Intelligence, Algorithms, Computer Security, Machine Structures, Data Structures, Discrete Math and Probability Theory, Linear Algebra, Calculus

Technical Skills:

Comfortable with Python, Lisp, Java, C/C++, L^AT_EX, sh, vim, and SQL

Proficient with HTML/CSS, javascript, git, GLSL, Tensorflow, Docker, and debugging/reverse engineering

Projects:

Github: Open Source Window manager

<https://github.com/wmutils>

- Patched features and contributed scripts to a set of open source C-based XCB window manipulation utilities.
- The project is part of an international movement towards complete control over a unix desktop; the idea is to fully modularize a window manager such that every feature choice is left for the user to customize.
- Wrote a window manager with workspaces, vim-like keybindings, and VU meter borders in shell script.

Github: Workspace customization tools

<https://github.com/agloo/themer>

- Suite of modular scripts aimed at desktop customization from CLI.
- A key script is a customized regressive k-nearest neighbor color overlay designed to make a color scheme match up with a wallpaper.

Experience:

Google: Summer 2017

Software Engineering Intern

- Focus is on modifying benchmarks to verify the performance of critical libc functions.

Berke1337: Fall 2016-Present

Competition team member

- Club dedicated to training for and competing in security competitions, specifically the Collegiate Cyber Defense Competition.
- Primary focus is on securing arbitrarily out-of-date systems in a high pressure environment.

Synack: Summer 2016

Software Development Intern

- Implemented a brokering service in Python for Hydra, Synack's main automated threat discovery service.
- Worked on a small team of primarily full-time employees implementing Python backend and a RESTful Flask web API.
- Benchmarked, identified and optimized several major bottlenecks in Synack's core system.

Berkeley EECS instructional: Spring 2016

Reader/Tutor

- Paid position tutoring weekly student sections focused on assigned homeworks for CS 70, Berkeley's required Discrete Math and probability course for Computer Science majors.
- Topics included discrete math, graph theory, cryptography, and probability theory.

Computer Science Mentors (CSM): Fall 2015-Spring 2016

Senior Mentor

- Taught an adjunct introductory computer science course for UC Berkeley (CS61A).
- Topics included Python, recursion, Functional programming in Scheme, SQL, and some basic data structures.
- Led weekly discussion based teaching sections with students and taught small group sections on teaching to other mentors.

Independent Computer Science Research: Spring 2015-Fall 2015

- Investigated an application of natural language processing on compression in an independent research project supervised by Professor John Denero.
- Wrote a testing environment in Python to benchmark an experimental compression algorithm.
- Implemented a cached Huffman-encoded compression algorithm using kenlm.

Extracurriculars and Interests:

Berkeley Carillon Guild: Spring 2014-Present

- Taught weekly lessons on basic carillon (belltower) form and musicianship to beginning carillon students.
- An end-of-semester recital is held wherein students played project pieces on Sather Tower.
- Interested in Computer Security, robotics, graphics, Music composition (manual and algorithmic), and machine learning.