

Undergraduates Seeking Internships

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Education

Yale University

New Haven, CT: Expected May 2019

B.S. in Computer Science and Mathematics (3.83/4.00 GPA)

Currently Enrolled in: Data Structures, Analysis of Algorithms, and Natural Language Processing. Previous coursework in: Programming in C/C++, Discrete Math, Intro to Computer Science, Linear Algebra, and Vector Analysis.

Experience

Natural Language Processing Researcher – LILY Lab at Yale

New Haven, CT: January 2017-Present

- Developing neural text summarization tools to atomize academic papers and their relevant citations. *Python/NLTK*
- Actively researching the field of NLP, focusing on neural network learning in Professor Dragomir Radev's LILY lab.

Software Developer, Technical Assistant – Yale Law School

New Haven, CT: January 2016-Present

- Collaborating on a 2-person project to develop a new search engine for the Law School built on Project Blacklight. It synthesizes disparate Solr indexes and comprehensively searches through website and library records. *Ruby on Rails*
- Designed a regex algorithm to link over 1000 footnotes for the e-book *Follow the Money* by Michael J. Graetz. *Python*
- Redesigned the Law School Case Search interface for general UX optimization. *HTML/CSS*

Software Development Intern – My Best Plan, LLC (Startup)

Houston, TX: May 2016-July 2016

- Developed a new credit card/invoice process in framework for the electricity rate plan analysis site, decreasing time spent by operators on account updates by 40% on average. Redesigned the back-end of the site. *Python/Django*
- Constructed new graphing tools to better inform operators about their choice of the best rate plan. *JavaScript*
- Designed a modular, automated screenshot file-naming system to eliminate human error in recordkeeping, reducing time spent on recordkeeping from up to 15 seconds per record to less than 3 seconds. *Python/Django*

Leadership

President, Business Manager – Duke's Men of Yale (Acapella Group)

New Haven, CT: October 2015-Present

- Manages logistics, plans tours, communicates with a wide variety of clients, coordinates with alumni, and ensures that the social group dynamic stays exciting while constantly taking care of financial matters and budgeting.
- Developed a new, gig-intensive business model that tripled the initial \$5000 of funding since the start of the 2016 academic year, in addition to acquiring at least \$20000 of value in a sponsored international tour to China.

Projects

Nutrifai (PennApps XV Hackathon): <https://devpost.com/software/pennapps-2017>

- Integrated iOS and web app. Implemented the Clarifai API to perform image recognition, then mines multiple nutritional databases to algorithmically display relevant health risks of the food. 4-person team. *Swift/Objective-C/NodeJS*

NeuroTec Vehicles: <https://github.com/flubadoo/NeuroPlanes>

- Extensive AI vehicle add-on pack for a video game called Garry's Mod. AI framework is completely custom. Developed a UI for the self-drivable vehicles and extended the AI framework from airspace to the ground, using HAA* algorithm to fully integrate ground vehicles. Over 10,000 downloads. 7-person team. *Lua*

Von Neumann Machine Simulator: <https://github.com/flubadoo/vonneumann>

- 16-bit computer that simulates all elements of a basic Von Neumann machine in bitwise form, and is able to fully process and run a slightly modified version of assembly language through recursive functional programming. *Scheme*

Interactive C++ Graphics Projects: <https://github.com/flubadoo/3dmodelviewer>

- Built a graphical version of *Conway's Game of Life* in that utilizes Qt graphics capabilities with full user interaction. Created a *3D Model Creator* that uses linear algebra to transform coordinate data to generate 3D Models. *C and C++*

Skills

Proficiency coding in C, C++, and Scheme. Familiar with Python, Javascript, HTML, Swift, Lua, Django, Rails, NLTK. Familiar frameworks and technologies: Git, UNIX, XCode, Rails, MATLAB, LaTeX, Calibre, and MS Office.