

Addison J Polcyn

<https://addisonpolcyn.github.io/>

CURRENT ADDRESS

15742 Madrone Hill Rd.
Saratoga, CA 95070

CONTACT INFORMATION

addisonpolcyn@gmail.com
(408) 888-8161

OBJECTIVE

I am a Software Engineer and a recent graduate from Purdue's Computer Science program. I am actively looking for a full-time position at a Software Company where I can hone my skills, grow, and develop software amongst the best.

EDUCATION

Purdue University, BSc in Computer Science

May 2019, West Lafayette, IN

Concentration: Machine Intelligence

Relevant Course Work: Compilers, Systems Programming, Databases, Algorithms Analysis, Data Mining & Machine Learning, Web Information Search & Management, Data Abstractions & Structures, Information Systems, Probability, Discrete Mathematics, Object Oriented Programming, Statistics, Linear Algebra, Computer Architecture

SKILLS

Programming Languages: Java, C++, C, Python, JavaScript, SQL, HTML, CSS, Qt, Bash, ARM Assembly, JSON, Map-Reduce

Software: Git, PostgreSQL, Firebase, Apache, AWS, Hive, Portable Batch System, MATLAB, R Studio, SAS, Qt Creator, Excel

WORK EXPERIENCE

iSpiEFP

Purdue University, Computational Chemistry

West Lafayette, IN

Full Stack Development ~ Java, Python, MySQL, JavaFX, SceneBuilder, JSON, Jmol, AWS, Git

Summer 2018 - Summer 2019

- GUI Design, Database Design, Server-Client File Transfer, Molecule Visualization, Cluster Job Submission, SSH Authentication
- Leading Development of new features by consulting with experts in other fields, and interviewing candidates for hire
- Refactoring and upgrading of current User Interface, and connection of separate features and libraries into a single application
- Participating in weekly team meetings by providing input and ideas for the future of iSpiEFP, as well as creating documentation

Transitivity in Applied Economics

Purdue University, Economics

West Lafayette, IN

Software Developer ~ Python, Excel, Git

Fall 2018 – Summer 2019

- Automated a method to solve transitivity problems for the testing of a new survey model for curating customer choices
- Eliminated human error, validating a thesis in economics choice theory using python and undirected graphs
- Applied my algorithm by creating and managing a Python Command Line tool to assist research members in analyzing excel files

Code For Fun

Codeforfun

Saratoga, CA; Menlo, CA

Instructor & Teacher's Assistant

Summer 2018

- Led youth level classes in: Game Design in Python, Python with Minecraft, Web Design, and Coding in Scratch

Chatfly

Shoppin LLC

San Jose, CA

Sales Representative Intern

Summer 2015

- Increased the sales of Chatfly by marketing the mobile application to small local businesses, and asking for feedback
- Improved User Experience by contributing ideas and user reviews to the dev team for an improved design of the application

PROGRAMMING PROJECTS

MiniJava Compiler

Spring 2019

Compiler & Interpreter ~ C/C++, Lex & Yacc, ARM Assembly

- Defined, parsed, and lexically analyzed MiniJava Grammar using Lex & Yacc; prior to AST construction and Type Checking
- Compiled MiniJava into ARM Assembly, or Interpreted the Language on the fly using C++ depending on git branch

Unix Shell Implementation

Fall 2018

Command Language Interpreter ~ C/C++, Lex & Yacc

- Built a complete shell implementation including subshells, pipes, file redirection, signal handling (ctrl-c, zombie elimination), runtime configuration file, built-in commands (cd, exit, source, etc.), wild cards, tilde and environment variable expansion

Dinner Recommendation System

Fall 2018

Memory Based Collaborative Filtering ~ Vector Space Similarity, Python

- Created a program which given a set of ingredients, would find a dish for a user; as well as predict a rating they would give
- Engineered a model using collaborative filtering based on similar users represented by vectors with cosine similarity

Breast Cancer Diagnostics

Fall 2018

Machine Intelligence ~ Python, Scikit-learn, Numpy, Git (Team Project)

- Classified Malignant or Benign tumors for 569 patients using Support Vector Machines, and testing with 2-Fold Cross Validation

TerminalHacker

Fall 2018

Website Game ~ Apache, MariaDB, AWS, Python, JavaScript, HTML, CSS, git (Team Project)

- Built a web game inspired from Fallout 4 running on AWS with Apache, and a real time leaderboard using AJAX and Callbacks

SurfHut

Summer 2018

Android/iOS Application Development ~ Angular JavaScript, HTML, CSS, Firebase, Ionic

- Developed a hybrid native application to run on both android and iOS using Google Firebase, Ionic, Angular JS, HTML, and CSS