Addison J Polcyn

(US Citizen) Age 22

CURRENT ADDRESS 15742 Madrone Hill Rd.

CURRENT ADDRESS

apolcyn@purdue.edu (408) 888-8161

OBJECTIVE

Saratoga, CA 95070

I am seeking a software development internship or full-time position in Software Development, Data Science, or Machine Learning.

EDUCATION

Purdue University, BSc in Computer Science

May 2019, West Lafayette, IN

CONTACT INFORMATION

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

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 **Natural Languages:** English, Spanish (conversant)

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 while consulting with experts in other fields, and interviewing new hires
- 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

Transitivity in Applied Economics

Purdue University, Economics

West Lafayette, IN

Fall 2018 – Summer 2019

Software Developer ~ Python, Excel, Git

- 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 Summer 2018

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

Chatfly

Teacher's Assistant

Shoppin LLC

San Jose, CA Summer 2015

Sales Representative Intern
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 & Interpeter ~ 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 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 (ctr-l 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 collabrative filtering based on similar users 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

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 **Minecraft ATM**Summer 2018

Automated Teller Machine in Minecraft ~ Lua, Tekkit, ComputerCraft

• Dreamed up and developed an ATM in Minecraft which dispensed Emeralds on a user's request from the local bank vault