Addison J Polcyn

(US Citizen) Age 22

CURRENT ADDRESS

15742 Madrone Hill Rd.
Saratoga, CA 95070

CONTACT INFORMATION

apolcyn@purdue.edu
(408) 888-8161

OBJECTIVE

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

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
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 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 & Interpeter ~ C/C++, Lex & Yacc, ARM Assembly

- Defined, parsed, and lexically anaylzed 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 (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 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