Jacob Byerline

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WEB PORFOLIO: www.jbyerline.com

Education – San Diego State University

Degree: Computer Science, Bachelor of Science **Graduation Date Expected:** Spring 2021 **GPA:** 3.5

Personal Achievement: Eagle Scout (June 2015) Venturing Summit Award (December 2018)

Coursework: Object Oriented Programming (Java, C++) - Assembly Language (HLA) - Embedded Systems (C) - Intermediate Data Structures (Java) - Advanced Data Structures (Java, C++) - Programming Languages (C, C++,

Python, Fortran, Scheme) - Game Programming (C#, Unity) - Systems Programming (C)

Southwestern College

Degree: Computer Science, Associates of Science with Honors

Graduated: 2019 GPA: Overall 4.0

Work Experience

Adium Technologies, San Diego, CA

Co-Owner January 2017 to Present

- o Install, maintain, and repair residential and commercial networks
- o Remote administration of networks via **Eero Admin Console**
- Certify client's networks meet Comptia A+ and Network+ standards

Projects

U.C. Berkeley Graduate Student Project – Group Project

- Gather social media posts using Hashtagify RESTfulAPI in C#
- o Utilized Newtonsoft library to read and write JSON files to create and save data
- Output data to .txt file with processed results by gender, age, and sentiment
- Produce data set that met predetermined standards

Model Cryptocurrency Blockchain – Group Project

- o LAN Blockchain using P2P connections in Java
- Uses Merkle Tree data structure to create blocks
- o Block is mined with **SHA-256 hashing algorithm** similar to Bitcoin

Drone Recon Project – Group Project

- Used Java, JSP, HTML, JS, and SQLite to create an interactive web-based simulation of drone recon
 of farmland conditions.
- Uses Tomcat web server to compile JSP, HTML and JS packages.
- o Utilizes Java Packages and follows Java naming convention

Arduino Data Collection - Group Project

- Created an **Arduino** program in **C** to collect data from thermostat, potentiometer, and light meter, and exported data to .txt file
- o Implemented a struct Data Structure in C to sort and convert .txt file to .csv file
- o Developed Matlab program to input .csv file and produce graphs related to data set

Address Book – Solo Project

o Implemented a binary search in Java programming language to create search an address book

Skills

Software Development Environments: GitHub, Xcode, IntelliJ, Visual Studio, Eclipse, Arduino IDE

Software Technologies: RESTful API, Linux, SSH, P2P

Software Language Experience: Java, C#, C++, C, Python, HTML, HLA

Software Concepts: Agile Software Development, Source Control, Real-Time Development