**Dump**

**Jacobk.xyz**

**TECHNOLOGY SUMMARY**

**Programming Languages:** Java, C/C++, Python, SQL, HTML, CSS, JavaScript, Tcl, Arduino

**Environments and Tools:** AWS, Android, Git, Unix, IOS, Linux, Unity, SVN, OSGI Knoplerfish,

**Software:** emacs, vim, vscode, eclipse, android studio, xcode, intelli-j

**PROFESSIONAL EXPERIENCE**

**Datapath, Duluth, GA, USA**

***Software Engineer Intern, May 2018 – August 2018***

* Designed admin configuration pages using web designer tool DGLux5 and JavaScript to allow greater ease of use and integration
* Improved user specific configurability by displaying cell-phone carrier data provided by SQL database
* Created an automated SMS service for Datapath’s MaxView Software in OSGI framework to replace legacy mailing service
* Interfaced with satellite data and commands using SNMP and UDP protocols in Tcl scripts to process unreadable satellite bit stream data into user readable values

**Center for 21st Century Universities, Atlanta, GA, USA**

***Research Assistant, November 2017*** ***– April 2018***

* Collaborated with Deloitte’s data science team to aggregate strategic plans and budgets for 600+ public universities across the U.S. and find trends in current and future university plans in respect to funding from state governments
* Created Python program to automatically pull search results of spread sheet items to optimize time spent in initial data gathering phase
* Facilitated speedier and less error prone analysis of data by writing Python/Batch scripts to convert pdf files to plain text

**PERSONAL PROJECTS**

**Unix Based Shell**

* Developed a custom shell for Unix Environment built from scratch in C++ with features such as foreground and background job handling, built in functions, and basic piping functionality
* Used low level system calls to communicate with the Unix OS to perform various tasks

**Unix Based Text Editor**

**Android Rat Tracker App**

**Obscuro**

**Smart-Bell**

* Created a prototype IOT dumbbell using an Arduino device to keep track of number of reps and sets performed using Arduino sensors
* Experimented with using Bluetooth capabilities in Arduino device to send workout data back to computer for analysis
* Developed a Python program to calculate next workout based on transmitted set data and previous workout routine to simplify user workout experience

**EXTRACURRICULAR**

**Student Government Association** *(IT Board Committee) August 2018 – Present*

* Created a plan to allow for student developed projects to be adopted by the IT Board for continued maintenance

**IOS club**

**WebDev** *(Member) August 2018 – Present*

**Power Lifting Team** *(Member)* *January 2017* *– August 2017*