TIMOTHY T. SIZEMORE

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EDUCATION

Western Carolina University Cullowhee, NC • Bachelor of Science in Computer Sci., 2014

• Selected Coursework:

 $\label{lem:computer Science Data Structures} \begin{array}{c} \textbf{Computer Science Data Structures} \cdot \textbf{Algorithms} \cdot \textbf{Computer Networking} \cdot \textbf{Operating Systems} \cdot \textbf{Object Oriented Systems} \cdot \textbf{Databases} \cdot \textbf{Mobile Application Development} \cdot \textbf{Computer Graphics} \cdot \textbf{Software Engineering} \cdot \textbf{Software Development} \cdot \textbf{Computer Organization} \end{array}$

 $\textbf{Mathematics} \ \text{Multivariable Calculus} \cdot \text{Statistics} \cdot \text{Discrete Math} \cdot \text{Logic}$

WORK HISTORY

WCU Office of Institutional Planning & Effectiveness (2011-2014) $\underline{Technical\ Assistant}$

- Wrote queries to collect statistical data on University population for in office use.
- Designed Python scripts to retrieve dynamically generated pdfs and spreadsheets.
- Developed a program used by the WCU English department that assists in their end of the year assessment.
- Assisted in the development of a webapp to assist in the automation of data requests in and out of office.

NOTABLE PROJECTS (GITHUB.COM/TSIZED)

- Paint Clone
 - Programmed using Java.
 - Developed all shape and brush logic using common design patterns.
 - Created a GUI using Swing.
- Cache Simulator
 - Programmed using Python.
 - Uni-processor capable of storing 32 bytes.
 - Command line interface.
- Circular Bounded Buffer
 - Programmed using C.
 - $-\,$ Entire project completed within kernel space.
 - Allows inter-process communication. Essentially, pipe.
- Ray Tracer
 - Programmed using C++.
 - Creates ray traced graphics in 3D space.
 - Capable of rendering ambient, diffuse, and specular lighting properties.
- Assessment Assist
 - Programmed using VBA.
 - Automated file distribution and data collection with analysis on rubrics.
 - Intuitive Excel interface.
- PiBot
 - Programmed using mostly Python.
 - Consists of a MVC Flask framework dynamic five page website, an API that abstracts hardware from software, and a robot that transmits video back through the website.
 - $-\,$ PiBot uses object detection to avoid hazards by utilizing the camera and a sonar sensor.

SKILLS

- Proficiency in software development in Java, Python, C, C++, Assembly, Visual Basic, Android.
- Familiarity with Regular Expressions, Threads, Sockets, Database Design, SQL, Django, Flask, LATEX
- Familiarity with UNIX, GNU/Linux, Win32.