



## PROFESSIONAL SUMMARY

*Vision-driven change agent with career-long record of software engineering, database management, and project coordination success for leading organizations*

Results-driven, accomplished Software Engineer highly regarded for developing technology solutions which meet and exceed demanding corporate and client requirements. Sought for superb analytical skills, with the ability to solve challenging problems using a combination of industry standard and cutting-edge technologies, delivering clean, well-structured code. Skillset to work compatibly with clients to understand requirements and develop products that exceed quality expectations with on-time delivery. Strong team leadership skills and Agile methodology knowledge with experience working in a team environment, able to collaborate with individuals from diverse backgrounds. Exceptional academic qualifications include a Bachelor of Science in Computer Science from South Dakota State University. Additionally, I have extensive experience working across multiple time zones, specifically with a team in China where there is a 12-hour difference.

### CORE COMPETENCIES

- Software Engineering
- C++ Development
- Software Project Management
- Object Oriented Programming
- Mixed Reality Applications.
- Technical Documentation
- Troubleshooting
- Agile Development
- Communications

## PROFESSIONAL EXPERIENCE

UNIVERSITY OF NEBRASKA AT OMAHA, OMAHA, NE, AUGUST 2021 — PRESENT

### RESEARCH ASSISTANT

- Contributed to the design and implementation of Augmented Reality applications on Microsoft HoloLens with a focus on biomechanics and human movement.
- Collaborate with Biomechanics Research Department.
- Research, Design and Improve user experience on the mixed reality application.
- Utilized a wide variety of technologies throughout operations, including C++, C#, Unity, MRTK, TCP/IP, JIRA, Visual Studio Code, Git, CICD pipeline with GitHub action. Doxygen to generate documentation of the software.
- Site: <https://sites.google.com/site/spyridonmastorakis/lab>
- GitHub: <https://github.com/PubuduS/Mixed-Reality-Avatar> (Still in development.)

SENCORE.INC, SIOUX FALLS, SD, SEPTEMBER 2019 — JANUARY 2021

### SOFTWARE ENGINEER

- Contributed to the development and optimization of Sencore MRD5800 and MRD7000 advanced modular decoder product lines, as well as associated sub-brands.
- Engineered and implemented a centralized authentication system using TACACS+ and PAM modules for MRD5800 unit and sub brands; enabling units to connect to centralized remote authentication server to grant access and perform AAA functionalities.
- Programmed a portable Java Auditor software to parse through frequencies and log matrices into a CSV file for each channel.
- Evaluated a legacy codebase to identify inefficiencies and integrate enhancements.
- Utilized a wide variety of technologies throughout operations, including C++, JIRA, Visual Studio Code, Git, Gerrit, PAM, TACACS+, SCons build system, Subversion, JS, ARM AT91 Micro-controllers, Debian GNU/Linux, TeamCity, MIBs, Java SE 8, Netbeans and cURL, Cross-Compilation, Bash, and Doxygen; utilized Git, Subversion and Gerrit for version control and code review; Python, Scons, Bash and Teamcity to cross-compilation and build system; MIBs to allow remote configurations of the settings; JAVA SE 8, Netbeans and cURL to create auditor software; Doxygen to generate documentation of the software.
- GitHub: <https://github.com/PubuduS/QAM-Auditor>

LARSON COMMONS, BROOKINGS, SD, AUGUST 2018 — MARCH 2019

### STUDENT WORKER

- Liaised with colleagues to provide service in a timely manner to boost efficiency of dining hall operations.

- Provided exceptional service to students and staff frequenting the dining hall.
- Maintained consistent communications with colleagues and senior management to exchange updates on operations.
- Learned to balance work duties with academic responsibilities.

## PROJECT EXPERIENCE

CURRENT PROJECT, IN DEVELOPMENT

### INDEPENDENT PROJECT

- Design and develop a Debian Linux-based CLI program to visualize sorting algorithms.
- Leverage tools in Makefiles and Scons build system to develop the program.
- Generate a map of the program using Doxygen.
- Establish a JIRA Workflow to document issues and identify continuing trends.

CURRENT PROJECT, IN DEVELOPMENT

### RETRO-GAMEBOY

- Design and develop a Debian Linux-based GUI program with SFML/Graphics.
- Leverage tools in Makefiles and Scons build system to develop the program.
- Generate a map of the program using Doxygen.
- Establish a JIRA Workflow to document issues and identify continuing trends.

PEACE LUTHERAN EARLY CHILDHOOD EDUCATION CENTER, BROOKINGS, SD, AUGUST 2018 — APRIL 2019

### SENIOR CAPSTONE PROJECT

- Assisted the Center with updating and maintaining their web software to effectively track the attendance of over 200 students and staff members.
- Learned Agile development, reverse engineering, database normalization, OOP designing, and PHP in order to effectively complete tasks.
- Created technical documents to monitor progress.

JAVA INSTITUTE, GAMPAHA, SRI LANKA, FEBRUARY 2014 — MARCH 2015

### FINAL PROJECT

- Engineered an inventory control software for Sapna, a small business in Sri Lanka, to streamline inventory management processes.
- Identified and addressed common issues of low-level inventory control software, troubleshooting to resolve these issues and achieve full functionality.
- Enhanced my working knowledge of SQL and Java tools, as well as OOP concepts, through completion of project tasks.

## EDUCATION AND CREDENTIALS

MASTER OF SCIENCE (M.Sc.) IN COMPUTER SCIENCE, 2021 - 2023

*University of Nebraska at Omaha, Omaha, NE*

*GPA: 4.0*

*Credits: 6/30*

*Research focus: Designing mixed reality applications with a focus on biomechanics and human movement.*

BACHELOR OF SCIENCE (B.Sc.) IN COMPUTER SCIENCE, 2019

*South Dakota State University, Brookings, SD*

*GPA: 3.537*

*Credits: 149/120*

*Dean's List Spring 2019*

ASSOCIATE DEGREE, 2014 - 2016

*American College of Higher Education, Dehiwala, Sri Lanka*

*Dean's List Fall 2014, Spring 2015, Fall 2015, Spring 2016*

*President's List Summer 2015*

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## PROFESSIONAL AFFILIATIONS

- Association for Computing Machinery

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## ADDITIONAL INFORMATION

**Languages:** English, Sinhala (bilingual)

**Technical Proficiencies:** C++/C, Java, Unity, MRTK, NetBeans, MySQL, SQLite, Git, Subversion, Bash, Scons, JIRA, TeamCity, Doxygen, Windows, Linux (Ubuntu), Microsoft Office Suite.

**Interests:** Cooking (Asian American fusion), Chess, Literature, RPG Games (Playing and Creating), Coding, I also enjoy writing steampunk themed stories.