# **Mark Buttenhoff**

#### **Skills**

Programming Languages
OS & Tools

Programming Languages C++, C#, Java, Javascript, Python, SQL, Lua

Linux, Windows, Android, Git, Visual Studio, Emacs/Vim, Unity, OpenGL

## **Education**

# South Dakota School of Mines and Technology

December 2018

**B.S.** in Computer Science

# **Internships**

#### Sanford Health

June 2018 - August 2018

· Created Sharepoint troubleshooting articles for the hospital phone system, and planned a system for ordering phone equipment online. Installed and configured IP phones and server equipment for the hospital paging system.

# **Projects**

# ESTAR - Virtual Reality Paramedic Simulation Tool - C#

· Virtual reality simulation tool for paramedic students developed for Google Daydream, Google Cardboard and desktop systems.

#### Image Editor - Lua

· Image processing program with image contrast, gamma, brightness, posterization, pseudocolor, equalization, edge detection, and automated thresholding features.

# Risk Strategy Game - Java/Android

· Two player Risk style strategy game for Android.

#### **GUI program - Java**

· Interactive graphical desktop program to display a map and information for a paleontology site.

#### Shortest Path Finder - C++

· Implementation of the A\*star search algorithm to find the shortest path between two players for a game.

# Ad Blocker Browser Extension - Javascript

· Ad blocker extension for Chrome that removes ad images and scripts from websites.

# **Courses**

- Programming Languages
- · Analysis of Algorithms
- Data Structures
- Database Management Systems
- Software Engineering
- Mobile Development
- Digital Image Processing
- GUI Programming

- Computer Organization and Architecture
- Cybersecurity
- Networking
- Operating Systems

## Leadership

- SDSMT Association for Computing Machinery, Vice President
- SDSMT Software Engineering Course, Dev Ops Team Lead
- SDSMT Students for the Exploration and Development of Space, Chair