

Mark Battenhoff

Software Engineer Sioux Falls, South Dakota

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Skills

Computer Languages C++, Javascript, Python, SQL, C#, Java, Lua, HTML, CSS
OS & Tools Linux, Windows, Android, Git, Visual Studio, NodeJS, Unity, OpenGL

Education

South Dakota School of Mines and Technology
B.S. in Computer Science

December 2018

Internships

Sanford Health

June 2018 - August 2018

- Wrote troubleshooting documentation for the hospital phone system, and prototyped a website for ordering phone equipment online. Installed and configured IP phones and server equipment for the hospital paging system.

Projects

Virtual Reality Paramedic Simulator - C#

- Virtual reality simulation tool for paramedic students developed for Google Daydream, Google Cardboard and desktop systems. Developed by a team of four, my responsibilities included displaying medical information to the user interface, particle effects, and automated testing.

Image Editor - Lua

- Desktop image processing program. Features included ability to modify image contrast, brightness, equalization, and perform effects such as posterization, pseudocolor, edge detection, and automated thresholding.

Risk Strategy Game - Java/Android

- Two player Risk style strategy game for Android. Developed by a team of three, my responsibilities included writing code to initialize the game state, handling touch screen input, and drawing the gameboard to the screen.

Map Draw App - Java/Android

- Android app that used GPS and the Google Maps API to draw the user's walking path on a map, and used the phone's accelerometer to change the path color based on the phone's orientation.

AI Pathfinder - C++

- AI program used to find the shortest path between two locations on a 2D map. Used the A* search algorithm to find the optimal path.

Courses

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| • Programming Languages | • Software Engineering | • Computer Organization and Architecture |
| • Analysis of Algorithms | • Mobile Development | • Cybersecurity |
| • Data Structures | • Digital Image Processing | • Networking |
| • Database Management Systems | • GUI Programming | • 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