

MATTHEW KOSAREK

Software Developer
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github.com/mattkae
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United States Citizen

 C/C++

 JavaScript/TypeScript

 C#

 HTML/CSS

 Python

 Java

 Git

 Node.js

 Webpack

 OpenGL

 Linux

 AWS

EXPERIENCE

Software Team Lead

July 2020 to Present

Vention
Montreal, QC



- Led a team in the development of industrial software applications including cobot palletizers, cartesian palletizers, and CNC machines
- Architected and developed the core application-level framework for all future client projects
- Developed and deployed a number of client projects to factory floors
- Interfaced with other teams on a daily basis to align on business goals and meet deadlines
- Planned, scoped, and organized long-term projects and daily tasks via Asana and Github Projects
- Individually contributed across many aspects of the codebase, from the firmware to the application layer

Software Engineer I

January 2018 to June 2020

Big Huge Games
Timonium, MD



- Developed and maintained the data pipeline - from data entry, to data validation, to data publishing - for Arcane Showdown
- Designed, built, and maintained a live operations scheduling and publishing web application for DomiNations
- Implemented a localization system for Arcane Showdown which allowed the game to be released in different languages
- Implemented game features on all parts of the stack, including tools, Unity client, and game servers

Teaching Assistant for Intro to Video Game Design

September 2017 to December 2017

Johns Hopkins University
Baltimore, MD



- Assisted beginner programmers in the development of 2D game engines using the SDL2 library

Software Engineering Intern

May 2017 to August 2017

Big Huge Games
Timonium, MD



- Developed a tool using C# and GTK to improve the workflow of the quality assurance team for DomiNations
- Wrote a comprehensive user manual that explains how the tool functions for both technical and non-technical users

Software Engineering Intern

May 2016 to August 2016

Sparkypants Studios
Baltimore, MD



- Developed a profiling framework for the game systems of Dropzone

EDUCATION

BSc Computer Engineering at Johns Hopkins University

September 2014 to December 2017

Baltimore, MD

- 3.53 GPA (Magna Cum Laude)
- Relevant Coursework: Computer Graphics, Object Oriented Software Engineering, Linear Algebra, Video Game Engines and Design, Operating Systems, Data Structures, Introduction to Renewable Energy Engineering

PROJECTS

- My **self-hosted personal website** where I do small projects in WebAssembly and OpenGL: matthewkosarek.xyz
- A **game engine** that I built from scratch in C++ and OpenGL: github.com/mattkae/MatteEngine
- My **self-installing emacs configuration**: git.matthewkosarek.xyz/emacs_config/
- Unfinished website about **realtime physics in video games**: physicsforgames.com/