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# Adenine Griffin

## EDUCATION

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**Lexington, KY** **University of Kentucky** **Aug 2019 – May 2022**

- **Accreditation:** BS in Computer Science, Mathematics minor (cumulative GPA: 3.82)
- **Notable Courses:** Computer Graphics, Linear Algebra, Systems Programming, Algorithms and Data Structures, Statistics, Numerical Methods, Applied Artificial Intelligence, Applicable Algebra, Cryptography
- **Honors:** Dean's List (2020-2022), Summa Cum Laude
- **Skills:** C++, C, ECMAScript/JavaScript, Python, OpenGL, Vulkan, GLSL, 2D Graphics, 3D Graphics, Databases, SQL, Artificial Intelligence, Jira, Blender, Network Security, HTML, CSS, SASS/SCSS, Amazon Web Services (AWS), Google Cloud, React, Vue

## EMPLOYMENT & FREELANCE

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**Frontend Web Developer** **Pho BC (Freelance)** **Apr 2022 – Present**

- Designed UI/UX in Adobe Experience Design (Adobe XD) and communicated with client to iterate on it
- Developed a website from scratch using clean and portable HTML, JS, and SASS/SCSS

**Full Stack Web Developer** **Jessamine County Schools** **Oct 2018 – May 2019**

- Designed UI/UX in Adobe Experience Design (Adobe XD) and communicated with client to iterate on it and come to a shared design
- Built a web application with over 10 thousand active users using Ruby on Rails
- Maintained a large scale network for the school system
- Accelerated hardware and software troubleshooting for various network issues

## RESEARCH

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**Lead Developer** **University of Kentucky** **Jan 2022 – Present**

- Led development on an entity component architecture
- Owned creator tools for authoring codeless simulations in custom environments
- Optimized performance for the architecture to perform well with several thousand object scenes using tools such as Valgrind, Very Sleepy, and Google Benchmark

## PROJECTS

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### Graphics Engine in Vulkan:

- Created a real time physically based rendering application engine in C++ using Vulkan
- Managed packaging and build automation of the project through CMake
- Wrote comprehensive documentation rendered using Doxygen
- Profiled optimizations and performance using several tools including RenderDoc, Intel Graphics Performance Analyzers, and a custom profiler

### Web markdown editor:

- Created Progressive Web Application (PWA) markdown editor using React.js
- Leveraged LocalStorage to create persistent documents, and CodeMirror with a heavily customized configuration to provide a clean user experience