Colin Quelle

1327 Surrey Lane, Rockville Centre NY 11570 | 516-526-2487 | colinquelle@yahoo.com | http://www.linkedin.com/in/colinquelle | https://github.com/cquelle3

EDUCATION

Binghamton University, State University of New York, Thomas J. Watson College of Engineering and Applied Science

Bachelor of Science in Computer Science **August 2018 – May 2021**

Major GPA: 3.61/4.00 | Cumulative GPA: 3.41/4.00 | Dean's List: Fall 2020 – Spring 2021

Drexel University

Bachelor of Science in Computer Science **September 2017 – June 2018**

Cumulative GPA: 3.43/4.00

TECHNICAL SKILLS

Languages/Frameworks: Java, Python, C/C++, C#, Javascript, React.js, Django, MongoDB, Angular, ExpressJS, NodeJS, LoopBack

Software and OS: XCode, Eclipse, Git, Linux, OS 10, Visual Studio Code

Additional: Photoshop, Unity, Logix Pro X, Microsoft Office

PROFESSIONAL EXPERIENCE

GSE Solutions, Full Stack Engineer | Remote **January 2022 - Present**

- Developing a web-based application using MEAN Stack to display nuclear powerplant data to customers and internal engineers
- Creating backend methods using NodeJS and LoopBack to connect an Angular frontend to MongoDB database
- Utilizing Flask and Python to create a separate backend used to pull data from MongoDB and perform calculations
- Testing and hosting versions of the application on Amazon Web Services EC2 Cloud instances

Urvin AI, Research Internship | Remote **August 2021 – October 2021**

- Investigated future technologies and studies involving AI music analysis and AI music generation
- Utilized various artificial intelligence libraries in Python, C++, and Javascript to extract musical data from audio files
- Compiled audio samples and documents to organize and present findings for senior software engineers

TechWorks, Game Development Internship | Binghamton, NY **January 2021 – May 2021**

- Developed a 2D Space Survival Game using Unity and C# for Binghamton's Center for Technology and Innovation
- Worked Weekly with a team to coordinate gameplay and game progression elements
- Created working Item, Inventory, Crafting, Events, and Tutorial systems that interacted with each other through the game

PROJECT EXPERIENCE

Binghamton University, Swift Co-Programmer | Binghamton, NY **February 2021 – May 2021**

- Developed the interface for a server-based Music Roulette game for iOS13
- Utilized iOS Tables and the Safari Services framework to create a grocery list app that could connect to the Wegman's website
- Learned to create interactive iOS games and drawing apps using SpriteKit and UIKit

Binghamton University, Java Co-Programmer | Binghamton, NY **August 2018 – May 2021**

- Created programs that used multiple design patterns, such as Decorator Pattern, Abstract Factory Pattern, and State Pattern
- Implemented the Pippin assembler in Java to take in and assemble an assembly file, and display the memory content into a GUI
- Utilized GitHub's Version Control System to manage project files, which met specifications using JUnit testing

Binghamton University, C++ Co-Programmer | Binghamton, NY **January 2019 – December 2020**

- Created a program implementing Dijkstra's algorithm to calculate shortest paths between nodes
- Compared the accuracy and run times of greedy algorithms and dynamic programming for the 0/1 Knapsack problem
- Created programs that sent messages over TCP and UDP connections between a client and server

Drexel University, Unity Game Developer | Philadelphia, PA **January 2018 – June 2018**

- Designed UI, game layout, characters, backgrounds, and title screen, using Aseprite, to create artwork for the project
- Worked with fellow classmates to coordinate art direction and animation with game concepts through group discussions
- Presented game demos to professors and other Computer Science students to showcase ideas and progress