

Work**Software Developer II** - Paycom*February 2022 - Current*

C# .NET development working with Paycom's Year End Utility. Generation and management of W2's, 1099's, and other tax forms.

Software Developer II - Paycom*June 2021 - January 2022*

Full stack development working with Paycom's Payroll module. PHP backend work, Javascript frontend, and mySQL/FoxPro database management. Experience with navigating large codebases and a huge variety of systems.

Computer Science Mentor - UTD CS Department*August 2019 - May 2021*

Assisting Undergraduate students with C++, Java, Discrete Math, and Data Structures.

Projects**AWS Image Rekognition Framework**

Python (boto3 API), NoSQL, CloudFormation Scripts

Worked with a team to provide cloud formation scripts for setting up AWS Rekognition services.

Automated SUTA Rate Updates

PHP, MySQL, RabbitMQ, Orchestrator Architecture

Paycom Project for automating clients' SUTA Rate Updates.

Payroll Late Submission Reminders

PHP, MySQL

Paycom Project for reminding clients of upcoming or missed payrolls.

Multidimensional Cellular Automata

C++, Unreal Engine 4

An Unreal Engine Project for making cellular automata (games of life) in generalized dimensions.

Virtual Reality Quiz

C#, Unity

Worked with a team to create quizzes for VR. One multiple choice style, one Geoguesser style.

Mobile "Pop the Balloons" Game

Java, Android Studio

A game with a scoring system and collision detection. Made with Android Studio for mobile devices.

Graduate Coursework**Machine Learning**

Python (numpy, sklearn)

The ID3 and the Nearest Neighbor algorithms. Formal models for analyzing learnability.

Virtual Reality

Unity Game Engine (C#)

In-depth overview of VR, including 3D navigation techniques, 3D selection and manipulation techniques, interaction, scenario, and display fidelity.

Computer Graphics

Java

Coordinate systems, Geometric transformations, basic 2D drawing primitives, Imaging in 3D. Fractals and the Mandelbrot set.