Education

University of Texas at Dallas (UTD)

Computer Science (CS)

BS, Spring 2020

GPA: 3.808 (3.844 Major); Magna Cum Laude

 $MS,\ Estimated\ Spring\ 2021$

Fall 2017

Projects

Dean's List

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.

Mobile "Pop the Balloons" Game Java, Android Studio

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

Minesweeper Java (Swing)

A copy of Microsoft's Minesweeper, complete with blank-cluster clearing, modifiable difficulties, and flagging.

Multidimensional Cellular Automata C++, Unreal Engine 4

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

Work

Computer Science Mentor

UTD CS Department

Fall 2019 - Spring 2020

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

CS Summer Camp Instructor

UTD CS Outreach

Summer 2019

Teaching one week courses of introductory-intermediate computer science to children grades 3-12.

Graduate Coursework

Computational Geometry

LaTeX, Java (Graphics2D), Unreal Engine 4 (C++)

Study and derivations of algorithms related to geometry. Incremental Construction, Plane Sweep, Linear Programming.

Human Computer Interactions

Java, C#, Android Studio, Visual Studio (Winforms)

The user experience (UX) lifecycle and design guidelines for a wide variety of advanced interfaces, such as mobile devices and 3D sensors. UX evaluation of interface designs.

Computer Graphics

Java, Java.awt

Bezier and B-Spline functions for curves, and line and polygon clipping algorithms. Perspectives in 3-D, and hidden-line and hidden-face elimination, such as Painter's and Z-Buffer algorithms.

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.