

CAT N. TRAN

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EDUCATION

Binghamton University | Thomas J. Watson College of Engineering and Applied Science | Vestal, NY

Bachelor of Science in Computer Science (Major GPA: 3.40/4.00)

May 2022

Double Major: Mathematical Science

Cumulative GPA: 3.25/4.00 | Dean's List: Spring 2021

SUNY Broome | Binghamton, NY

Associate of Science in Computer Science (Major GPA: 3.60/4.00)

May 2018

Cumulative GPA: 3.30/4.00 | Dean's List: Fall 2016 | President's List: Spring 2018

Relevant Coursework: Google's Machine Learning, Operating Systems, Advanced Object-Oriented Programming, Microprocessors and Assembly Language, Digital Logic, Programming Languages, High-Performance Computing, and Intelligent Mobile Robotics

TECHNICAL SKILLS

Languages: C, C#, C++, Java, Python, HTML, JavaScript, R, SQL

Frameworks: React Native, React JS, Express JS, Node JS

Tools: Unity, Unreal, Wordpress, XCode, Android Studio, ROS, Blender 3D, Git, Arduino, AWS(Amazon Web Services), Jupyter Notebook, PyBullet

PROFESSIONAL EXPERIENCE

Binghamton University Physics Department | VR Research Aide | Vestal, NY

September 2021– April 2022

- Developed a VR experience about a Guided Tour of the Lithium-ion Battery in C# using Unity platform
- Built a VR environment from 2D animation by translating 3D designs and adding interactivity to Cinema 4D files
- Designed the virtual reality space to provide the ideal experience for the user

ConnectExpat | React Native Developer | Vestal, NY

December 2020 – September 2021

- Designed a social media mobile application using React Native (JavaScript) for iOS and Android
- Tested and debugged the MVP application to ensure it is up to client satisfaction before launch
- Set up the company website using HTML and launched with an EC2 instance from AWS (www.connectexpat.com)

AT&T | Summer Learning Academy Externship | Remote

July 2020 – August 2020 | July 2021 – August 2021

- Completed a virtual 80-hours externship comprised of self-paced learning modules, live speaker presentations, and activities
- Gained insights and advice on business, leadership, and career from business executives and recognized experts
- Completed entry-level training in human resources, finance, advertising, media and technology, communication, and leadership

ValuAg | Lead Software Developer | Binghamton, NY

June 2019 – August 2019

- Developed a minimum viable product of a real time location based mobile game using C# on Unity
- Determined and designed the game's basic concepts and functions
- Programmed functions to connect the game with the backend SQL databases using PHP

PROJECT EXPERIENCE

Reinforcement Learning Robotic Arms

May 2022

- Utilized reinforcement learning to teach two Franka Panda robotic arms to play Tic-Tac-Toe against each other.
- Created the simulation in PyBullet using Python to help simplify the learning process.

Robot FPS Game

November 2021

- Developed cyberpunk first person shooter game using C# on Unity, which was later exported to the website as a WebGL
- Programmed different AI models for each enemy type and designed the map layout and levels for each stage of the game.

MNIST Neural Network

May 2021

- Developed a neural network that recognize the handwritten dataset MNIST using Cuda (C++11)
- Reduced the total training and testing time of the program by taking advantage of multi-threaded parallel programming.

More projects on <https://www.catcodebox.com>.

LEADERSHIP EXPERIENCE

American Civic Association | Volunteer Translator | Binghamton, NY

June 2014 – October 2020

- Supported the service by translating documents from Vietnamese to English for non-native speakers
- Interpreted private meetings for multiple clients

AgZeit | Lead Programmer | Binghamton, NY

June 2019 – August 2019

- Led a small game development team of graduate students to ensure all tasks given to team members were completed properly and on time
- Taught newcomers the basics of Unity and Mapbox to allow them to have the proper tools for the job