

Ryan Park

Fairfax, VA | 703-350-1800 | ryan.park@utexas.edu | linkedin.com/in/ryandpark2006/

EDUCATION

The University of Texas at Austin	Bachelor of Science, Computer Science Honors	May 2027
	Bachelor of Business Administration, Canfield Business Honors	
	Scholarships: McCombs Full-Ride Scholar, Washington D.C. Chapter Scholarship	

TECHNICAL SKILLS

Code Languages: Python, Java, C, C++, Solidity, HTML/CSS, JavaScript, Go

Tools: React, Mongo DB, Tailwind CSS, Firebase, NumPy, Pandas, Scikit-learn, TensorFlow, PyTorch, OpenCV, tRPC

Platforms: Git, Linux, MacOS, Windows, Jupyter/Colab, Fusion360, Docker, Base, Bittensor

Work Eligibility: Eligible to work in the U.S. with no restrictions

EXPERIENCE

Manifold Labs - *Software Engineering Intern*; Austin, TX May 2025 - Present

- Maintained large-scale distributed training systems, including automated version tracking and deployment via GitHub-integrated scripts and communication optimization using FSDP/DDP with gradient compression for bandwidth-constrained environments
- Contributed to GoBt and TaoXYZ wallet ecosystem, optimizing over 50+ Rust-Go endpoint methods with testing and implementing new cold wallet transfer functions in the Chrome extension; refactored backend API integration to a type-safe tRPC-like architecture

Pi Squared - *Semantics Intern*; Austin, TX September 2024 - May 2025

- Developed an LLM-based system to extract and align language semantics with code samples using Retrieval-Augmented Generation (RAG), focusing on Ethereum Virtual Machine (EVM) standards and exploring alignment through RLHF
- Developed a Solidity code analysis pipeline by crawling GitHub to identify Solidity projects, compiling smart contracts into EVM bytecode, and disassembling bytecode into human-readable opcodes through a docker container

NIST Center for Neutron Research - *Software Engineering Intern*; Montgomery County, MD May 2023 - May 2024

- Designed server notification system, featuring dashboard for real-time monitoring and prediction of beamline control parameters
- Engineered transformer model with 'multi-head attention' mechanism for anomaly detection of Closed Cycle Refrigerators (CCR)
- Created first public multivariate timeseries datasets by scraping 20 years of CCR and magnetism data from NCNR database

Potentia Robotics - *Founder & Computer Vision Lead*; Chantilly, VA April 2021 - December 2023

- Orchestrated 40+ member team and managed \$10K budget to build 6-ft general-purpose humanoid robot, overseeing system design and daily operations
- Constructed lower-body of robot, implementing Computer Vision techniques and Simultaneous Localization and Mapping algorithms

TJREVERB - *Software Engineer*; Alexandria, VA September 2020 - April 2022

- Implemented flight software for a 2U CubeSat, which evaluates the signal connectivity of the Iridium radio alongside the ISS' orbit
- Launched 2kg Cubesat on the SpaceX CRS-26 mission and received the Innovative STEM Student Program of the Year by National Consortium of Secondary STEM Schools

PROJECTS

Integrating Self-Organizing Maps with K-Means Clustering September 2023 - January 2024

- Developed hybrid clustering algorithm with a 99.8% reduction in sum of squared errors (SSE) and a 67% increase in Silhouette Score
- Authored 12-page research paper that demonstrates SOM's effectiveness in uncovering topological structures and enhancing clustering clarity over traditional centroid-based approaches

EchoVest: Real-Time Sound Classification Using TENS May 2022 - November 2023

- Created Audio Spectrogram Transformer, surpassing Convolutional Neural Network-based models in accuracy, achieving 95.7% accuracy on the ESC-50 dataset
- Presented paper at the MIT Undergraduate Research Technology Conference; accepted into the 2023 Sigma Xi International Forum on Research Excellence; co-first author publication in the IEEE Xplore Digital Library and primary author in Teknos

Project SHIELD September 2021 - December 2023

- Designed and created an app using Figma and Django that allows civilians to alert and stream acts of injustice to local Police Stations
- Mentored by Edward Sverdlin and Jon Herke, interacted with 2 police stations and received buy-ins from 20 police stations

LEADERSHIP EXPERIENCE AND ACTIVITIES

Texas Blockchain - *Project Lead, DevOps Engineer* September 2024 - Present

- Developing battle royale-style platform where users bet on cryptocurrency price movements, competing for a shared prize pool
- Running a node hosting center with active participation in securing Quai Network, XRPL, XRPL EVM Sidechain
- Worked under Dr. Sriram Vishwanath and MITRE to develop a LLM for governance and confirmation management in blockchains

InstaChip (YC W25) - *Compiler Engineer* September 2021 - April 2023

- Developed a machine language for an optical computer and aided in efforts to raise \$50K as a startup from the 1517 fund

Boy Scouts of America - *Eagle Scout* June 2022 - March 2023

- Guided a dynamic troop of 60+ scouts, coordinating monthly campouts and weekly meetings as senior patrol leader