

Aaron Xu

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EDUCATION

Texas A&M University – College Station, TX
Master of Computer Science

Expected Graduation: Spring 2026

- Relevant Coursework: Analysis of Algorithms, Deep Learning, Deep Reinforcement Learning, Randomized Algorithms, Software Engineering

The University of Texas at Dallas – Richardson, TX
Bachelor of Science, Computer Science

May 2024

- Relevant Coursework: Data Structures, Advanced Algorithm Design & Analysis, Database Systems

SKILLS

Technical Skills: Java, Python, C++, HTML, CSS, ReactJS, SQL

Tools: NumPy, Pandas, Scikit-learn, Keras, TensorFlow, PowerAutomate

Specialized Knowledge: Machine Learning, Neural Networks, Deep Learning, Reinforcement Learning

Certifications: IBM: Machine Learning with Python (July 2022)

IBM: Introduction to Deep Learning & Neural Networks with Keras (July 2022)

Microsoft Technology Associate: Introduction to Programming Using Java (July 2021)

EXPERIENCE

AI Intent Research – University of Texas at Dallas (Dr. Vincent Ng)

May 2024 – October 2024

- Compiled 4000+ images using Python scripts and OpenCV for AI model training
- Analyzed generated output of trained model leading to improvements of 30%

L3Harris – Greenville, TX

May 2023 – November 2023

Software Engineer Intern

- Developed automated testing scripts using Bash to validate subsystem interactions
- Integrated code scanning tools into GitLab CI/CD pipeline improving code quality and coverage metrics
- Designed and implemented a serialization framework for Java and C++ subsystem data exchanges

Cisco-Eagle – Dallas, TX

June 2022 – August 2022

Communications and Information Technology Intern

- Supervised activities on SharePoint and affiliated websites improving system usability
- Migrated company files to SharePoint utilizing Microsoft migration tools
- Automated key business workflows using PowerAutomate reducing manual processes by 80%

PROJECTS

AI Game Agent

Fall 2024

- Used PyGetWindow to capture real-time frames for the game Touhou as input for the AI agent
- Trained the agent using reinforcement learning algorithms running over 1000+ generations
- Experimented with different model architectures such as DQN and DDPG improving model performance by 40%

Loan Underwriting

July 2022

- Built a predictive model using Python libraries NumPy, Pandas, and SKLearn to analyze historical customer data
- Achieved 95% accuracy in determining loan approvals by optimizing hyperparameters

Stock Forecasting Model

July 2021

- Processed financial data from Yahoo Finance API to train LSTM models in Python
- Improved forecasting accuracy by fine-tuning model parameters and integration of moving averages

LEADERSHIP & COMMUNITY INVOLVEMENT

EPIC Movement – University of Texas at Dallas

Fall 2022 – Spring 2024

President

- Directed organizational strategy and managed administrative tasks for a team of 17 officers
- Supervised event planning for 40+ events
- Facilitated bi-weekly meetings to align goals and delegate responsibilities between officers