

XINYU (JONATHAN) GUAN

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Motivated Computer Science Student with hands-on experience through projects, internship, and Teaching Assistantship. Focused on AI, deep learning, and data-driven technologies. Eager to contribute to impactful, innovative solutions. Fluent in English and Mandarin Chinese.

EDUCATION:

Master of Science in Computer Science Candidate (May 2025)

Pace University | GPA: 4.0 | 2023–Present

Academic Projects:

Task Manager; Suggest and Design a Minimal CPU Architecture for Controlling Washing Machines; Parking Management System Database: Design and Implementation; Bone X-ray Classification with Deep Learning and Transfer Learning, etc.

Research Project:

CUDA Research IMG Processing.

Secure Campus Network Monitoring System.

Bachelor of Arts in Biological Science (May 2022)

University at Buffalo | 2017–2022

WORK EXPERIENCE:

Sep 2024- Current

Teaching Assistant - Pace University (Parallel Computing Class)

- Conducted in-class presentations on parallel computing concepts
- Provided hands-on guidance for students during coding exercises and class activities.
- Setting Office Hours to assist students with coding issues, conceptual understanding, and assignment grading with feedback.
- Working with the professor on a CUDA project for class exploration, focusing on real-world applications of parallel processing.

May 2021-Aug 2023

Software Engineer Intern– SysDesign LLC

- Led Data Virtualization Team Projects: Lead and member of six-person team using Python and Java that improved data analysis and logging performance by over 20%
- Streamlined communication between development and operations teams, resulting in a 15% reduction in project delays.
- Developed comprehensive data reports with SQL Server Reporting Services, reducing report generation time by 25%.
- Collaborated with team members to integrate software design best practices, boosting team productivity by 30% and improving code quality.

May 2020-Sep 2020

Bookkeeper - BEIJING XINANPENGYU Supply Chain Ltd.

- Optimized Financial Reconciliation: Reconciled five bank accounts monthly, assisted with collection efforts for outstanding invoices, and calculated monthly inventory reserves, achieving a 95% accuracy rate using Microsoft Excel.
- Organized Financial Records: Sorted and organized over 500 files, spreadsheets, and reports to streamline data retrieval.
- Maintained Vendor Correspondence: Prepared and mailed statements to vendors and maintained meticulous correspondence records, reducing invoice discrepancies by 10%.

ACADEMIC PROJECTS:

Bone X-ray Classification with Deep Learning and Transfer Learning

- Developed and implemented a Convolutional Neural Network (CNN) with ResNet50 to classify X-ray images
- Utilized TensorFlow and Keras for model building, training, and evaluation.
- Evaluated the model using metrics such as binary accuracy, precision, recall, and confusion matrices for both binary and multi-class classification.

PROFESSIONAL PROJECTS:

Bone File DNA Web APP

- Collaborated with a team of six to develop a comprehensive platform for document management, workflow, archiving, and access authorization.
- Organized Bio DNA chains to verify data accuracy, and demo testing of the application.
- Implemented advanced security features, e-signature, and blockchain integration.
- Contributed to the development of a PDF editor with QR code authentication, scanner, and translator.

Open Galaxy Web App

- Worked in a team of 6 to create a web app allowing users to choose stars and unlock galactic superpowers.
- Implemented distinctive properties, stats, and boosts for each star.
- Tech stack: Frontend - Next, Headless UI, Tailwind CSS; Backend - Solidity, .NET, Restful API; Database - MySQL.

TECHNICAL SKILLS

- Languages:** Python, Java, C/C++, JavaScript, Shel. **Frameworks:** TensorFlow, Keras, PyTorch, React, Next.js, Vue.js, Strapi. **Databases:** MySQL, PostgreSQL, SQL Server. **Tools:** AWS (S3, EC2), Restful APIs, Docker, Microsoft SQL Server
- Expert (★★★★★):** Software Design, Code Writing, Performance Monitoring, Team Collaboration, Leadership