Linlin Zhang

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Education

Columbia University Aug. 2024 – Dec. 2025
M.S. in Computer Science *New York, NY*
- Track: Vision, Graphics, Interaction, and Robotics (VGIR)

University of Wisconsin-Madison Sept. 2021 – June 2024
B.S. in Computer Science and Data Science *Madison, WI*
- GPA: 3.9/4.0, Honors Program, Dean's List (all semesters), Minor in Art

Technical Skills

Languages: Java, Python, C++, C, C#, JavaScript, TypeScript, Swift, R, SQL, HTML/CSS, Bash, PHP, Ruby, Go
Frameworks: TensorFlow, PyTorch, Django, .NET, Spring, Rails, Flask, Node.js, React, Angular, JQuery, MongoDB
Other/Tools: Xcode, Android Studio, IntelliJ IDEA, VS Code, Git, JIRA, Jenkins, Docker, Firebase, GCP, AWS, Matlab, Colab, Rhino, Linux, Ubuntu, OpenCV, Shell, SaaS, Cloud Computing, Redux, NLP, MuJoCo, Isaac Sim
Design: Unity, Blender, Figma, AE, AI, PR, PS

Professional Experience

Activision Blizzard May 2025 – Present
AI localization Intern *Irvine, CA*
- Fine-tuned LLMs, raising translation scores by 15%+ over industry MT baselines, supporting localization workflows.
- Built end-to-end pipelines: data-preprocessing, fine-tuning, evaluation, with dashboards cutting 40% quality monitoring time.
- Developed a multilingual TTS pipeline with SSML, IPA disambiguation, reducing alignment costs, improving accessibility.
- Delivered production-ready tools: *Localization Hub*, *Audio Description Generator* that shortened content turnaround by 20%.
- Created a no-code AI Assistant Builder enabling each team (LQA, Audio, GC, Production etc.) to build RAG tools integrated with SharePoint, Confluence, Jira, files, urls etc. Collaborate with cross-functional teams to integrate AI solutions.

Alphabet Inc. June 2023 – Sept. 2023
Software Development Intern *Mountain View, CA*
- Developed a scalable YTM Music Library Management System using Koa, Axios, Koa-jwt, MongoDB, improving 20% platform stability, 30% user satisfaction Enhanced system performance with GCP deployment, load balancing across multiple servers.
- Built a custom metadata parser in Node.js, extracting song titles, artists, album art with 95% accuracy over 10,000+ tracks.
- Designed and launched a RESTful API for third-party integration, reducing integration time by 40%.
- Utilized TensorFlow to classify audio metadata, boosting efficiency by 30% and cutting processing time for 10GB+ datasets.

CTI One Corporation Sept. 2023 – Mar. 2024
CV and Software Engineer Intern *Santa Clara, CA*
- Led AI-driven healthcare solutions for the W100 robotics healthcare project, achieving a 25% increase in product efficiency by applying OpenCV, Python, and PyTorch.
- Established strict version control protocols on GitHub, achieving a 30% reduction in merge conflicts. Performed efficient system architecture using C++, Python, leading a 10-person team in cross-departmental projects.
- Implemented a ML-based diagnostic system on AWS cloud services for real-time image analysis, elevating 15% accuracy.
- Developed 10+ webpages based on React, A/B test to attract and handle 1,000+ daily active users. Optimized data pipeline using Django, PostgreSQL to process 2GB daily, implementing Redis caching to reduce latency by 20%.

Audiomack Inc. Mar. 2025 – May 2025
Data Analyst Intern *New York, NY*
- Develop and enhance comprehensive, predictive artist and song data tools. Audit and optimize internal databases and refine SQL queries for improved efficiency.
- Assist in signing and release administration for Audiomack's Distribution operations. Work closely with the A&R team to refine internal A&R data tools and analyze key insights. Executing GTM strategies for new business verticals.
- Support the Director and Manager of Licensing & Music Partnerships with departmental initiatives.

Research Experience & Projects & Patent

Creative Machine Lab (Robotics) & CGUI Lab (VR/AR) Jan. 2025 – Present
Researcher *New York, NY*
- Investigating video-based recovery of soft-body simulation parameters using ViT-based transformers, with dataset generation and training for 2D/3D MPM simulations. Simulated dynamics with Taichi-Lang, modeling mass–spring systems to study soft-body behavior. *Computer Graphics and User Interfaces Lab* XR projects: LLM-based interaction (Unity, VR/AR), PolXR radar visualization (Photon Fusion2), and a 3D VR-AR ArtGallery (Unity/Blender).

Modern Data Visualization of Big Data Mar. 2023 – May 2023
Team Leader *Madison, WI*
- Built ML models (Python, R, TensorFlow) on 6K+ air-pollution mortality records (27 yrs), improving accuracy by 30% through advanced preprocessing and comparative analysis (Linear Regression, KNN, SVM, Polynomial Regression).
- Optimized data handling with SQL, Pandas, reducing processing time by 20%; Completing visualization with Matlab .

Wisconsin Autonomous Team & Applied Computer Vision Dec. 2021 – Dec. 2022
Team Leader *Madison, WI*
- Built 2D object detection system (Python, C++, Yolov7, PCL), improving accuracy by 30% and cutting latency by 25% with CUDA, lidar, and OpenCV; optimized training pipelines with GCP, TensorFlow, and Docker, and scaled deployment on Azure/Kubernetes for high availability.
- Directed large-scale dataset preprocessing (OpenCV, Pandas), boosting accuracy by 20%; fine-tuned and deployed TensorFlow models on AWS/Colab for 25% faster inference, including a real-time mobile app with TensorFlow Lite. **Patent:** SuikeJi Note-Taking App (OpenCV, Android Studio, Firebase).