

PEIYU LIN

☎ (206) 666-7021 | ✉ poppy.linpy@gmail.com | in LinkedIn | GitHub | 🌐 Willing to Relocate

EDUCATION

- **Northeastern University** Sep 2023 – Apr 2026
Master of Science in Computer Software Engineering; GPA: **4.0/4.0**
 - Courses: Data Structures and Algorithms, Object-Oriented Design with C++, Operating Systems, Data Management and Database Design, Web Design and User Experience Engineering

EXPERIENCE

- **KLA** Jun 2025 - Dec 2025
Software Engineer Intern | Python, LLMs, Elasticsearch, HPC(Hercules) Milpitas, CA
 - Developing Fab Assistant, a LangGraph-based multi-agent system for semiconductor equipment troubleshooting, featuring a supervisor agent orchestrating 4 specialized agents (Setup, Troubleshooting, Recipe, Calibration)
 - Building data pipelines integrating ChromaDB for manual retrieval, Elasticsearch for log analysis, and SQL databases for process analytics, reducing equipment diagnostic time
- **Northeastern University** Aug 2024 - May 2025
Graduate Teaching Assistant | Object-Oriented Design with C++ Seattle, WA
 - Spearheaded 6-hour weekly TA sessions, mentoring 30 students, resolving compatibility issues on macOS, Linux, and Windows, and debugging code to provide technical support
 - Reviewed code, provided constructive feedback, and graded weekly OOP assignments and exams
 - Weekly authored and maintained 25 pages of comprehensive documentation to support course materials

PROJECTS

- **Music Player** | C++, Qt, Multithreading, Audio Processing, SQLite 🔄
 - Developed a music player using C++ and Qt, featuring high-quality audio playback, playlist management, and synchronized lyrics. Integrated QMediaPlayer and QMediaPlaylist to handle multiple audio formats
 - Integrated SQLite database for persistent storage of user data, including playlists and media metadata
- **House Prices Estimation** | Python, Pandas, NumPy, Scikit-learn, Plotly, Seaborn, Joblib
 - Analyzed Zillow's housing data with over 1M records, addressing high sparsity, missing values, outliers, and scaling issues through univariate and multivariate imputation, outlier handling, and normalization
 - Optimized model training pipeline with Joblib parallel processing, reducing training time by 15%
- **Bird Recognition Site** | TensorFlow, CNN, EfficientNet 🔗
 - Built and deployed a Streamlit-based bird recognition site with CNN classification, Wikipedia API integration
 - Fine-tuned EfficientNetB4 with transfer learning on a 10,000-image dataset, applying advanced data augmentation to enhance model robustness and generalization

HACKATHONS

- **Salesforce TDX 2025 Agentforce Hackathon** | AI Agents for Healthcare Institutions
 - Developed an AI-powered medical assistant using Agentforce, designed to streamline online appointment booking
 - Architected and implemented complex integration workflows leveraging Apex, Flow, and Salesforce Einstein AI capabilities to enable real-time data exchange between patient portals and hospital EMR systems
- **Qualcomm & Microsoft 2025 On-Device AI Hackathon** | On-Device Medical Interpreter
 - Engineered a comprehensive full-stack solution for processing medical record images, featuring automated recognition, interpretation, and translation functionality
 - Architected the application using FastAPI backend integrated with React frontend, deployed local Large Language Model APIs, and streamlined deployment through Docker containerization

SKILLS

Programming Languages	C++, Java, Python, JavaScript, SQL, HTML/CSS
Technologies and Databases	Agile, Git, MongoDB, MySQL, Maven, Docker
Full Stack Web Development	Node.js, React, Django, Spring Boot
Data and AI/ML	TensorFlow, Scikit-learn, Transformers, OpenCV, Pandas, NumPy