Bo Yang

New York, NY

Email: byang0845@gmail.com
Mobile: 860-729-0003
Website: https://by364.dev
GitHub: https://github.com/bya0845

EDUCATION

Georgia Institute of Technology — Dec 2025
M.S. Computer Science
- GPA: 3.90
- Coursework: System Design in Cloud Computing, Graduate Algorithms, Advanced Operating Systems, Deep Learning, Artificial Intelligence, Database System Implementation, Computer Networks

University of Connecticut
B.S.E. Civil Engineering

EXPERIENCE

Ingenimax — Remote
Engineering Intern — *Dec 2024 – Jan 2025*
- Contributed to a platform-engineering AI agent MVP that automated deployment for Amazon EKS clusters based on client needs.
- Tested and evaluated LLM query handling, chain-of-thought reasoning, and context retrieval mechanisms.

South Col Engineering, P.C. — Albany, NY
Structural Engineer — *Aug 2021 – Present*
- Conduct bridge inspections in NYSDOT Region 8 as subcontractor to WSP.
- Maintain bridge inspection software and local databases.
- Take field measurements, gather inspection field data, and perform structural loss calculations.
- Update bridge inventory according to field data and construction plans.

PERSONAL PROJECTS

Lightweight Spark
Distributed Systems Project — *github.com/bya0845/rust-spark*
- Built a distributed Spark/MapReduce framework in Rust supporting parallel data transformations and partitioning across worker nodes.
- Supports local deployment via KIND and cloud deployment on Azure AKS.
- Implemented leader election with etcd and inter-node coordination using gRPC and Tokio.
- Developed a CLI for package installation, Azure configuration, and reduce-output verification.

Bridge Database Management Application with AI Search
Full-Stack Application — *bridge-app.by364.dev*
- Built and deployed a web application using Flask and Fly.io for bridge data management.
- Processed individual bridge location and structural data into an SQLite database and implementedd natural-language AI search using a lightweight transformer. SQL querying also supported.
- Fine-tuned a 60M-parameter T5 model to translate natural language queries into validated database endpoints for the AI search feature.

SKILLS

Programming Python, Rust, C/C++, SQL

Tools and Frameworks PyTorch, MLflow, pandas, NumPy, Azure (AKS, AI, Database, Web app, Storage), Docker, Kubernetes, CI/CD, Git, gRPC, etcd, MPI, OpenMP, TypeScript

Languages English (native), Mandarin Chinese (native)