Yuanlong Zhou

302 Ball Street, College Station, Texas, 77840 | ryanbowz@outlook.com | (979) 344-4239 | ryanbowz.github.io

PROFILE

✧ Self-motivated graduate student majoring in Computer Science at Texas A&M University, with 3+ years' experience in Full-Stack Development (Web/Mobile/PC), Cloud Service (AWS), Machine Learning, System, Database, Algorithm, Game Design, VR/AR.

EDUCATION

Texas A&M University | College Station, Texas, USA   **Aug 2023 – Dec 2024**
Master of Science in Computer Science   ***In Progress***
❖ Key Courses: Software Engineering, System Architecture, AI and Deep Learning, Algorithm, Cloud Computing and Database.
Sichuan University | Chengdu, Sichuan, China   **Sep 2019 – July 2023**
Bachelor of Engineering in Computer Science & Financial Engineering (Dual-degree)   ***GPA: 3.8 / 4.0***
❖ Key Courses: Object-Oriented Programming (C++, Java, Python), OS, Networking, Compilers, Graphics, Statistics, Quantitative.

EXPERIENCE

Dots Rhythm Technology Co., Ltd | Nanjing, China   **Aug 2022 – Aug 2023**
E-Commerce Intelligent Recommendations Web System, Chief Software Engineer
- Constructed and maintained C/S resources and infrastructures to provide recommendations for thousands of users, optimized loading balance and storage logic on Amazon Web Services (EC2), culminating in a 56% boost in large-volume computing capacities.
- Executed Java EE specifications (Servlet, JSP, DAO, EL, WebSocket), adhered to Spring MVC design pattern (Vue, Node.js, React, MySQL, NoSQL), and integrated with containers (Docker, Kubernetes) to establish a resilient and scalable system architecture.
- Adopted Postman, Ajax, and Apache Tomcat to design and test RESTful APIs, took Lambda Architecture to handle batch processing and real-time transmission, ensuring seamless and error-proof data synchronization with a notable 60% reduction in latency.

Business AI Lab | Nanyang Technological University, Singapore   **July 2022 – Dec 2022**
Integrated Machine Learning System for Financial Risk Management, Research Assistant
- Employed an array of Machine Learning algorithms (SVM, RF, Bayesian, LSTM, Gradient Boost, Transformer) to the optimization of Financial Models (Investment, Portfolio, Pricing, Risk, Cash-flow), explaining 86+% risk factors for CSI 300 stocks and options.
- Conducted nuanced synergy analyses by delving into mathematical implementations and model evaluation metrics (PDP-ICE, AUC-ROC, Confusion Matrix, and SHAP), adjusted parameters (Random / Grid Search, Genetic Algorithms, Step Decay) to achieve a 33% performance enhancement above baseline, bolstering generalization and adaptability across diverse business data scenarios.

HUAWEI Student Developer | Chengdu, China   **Sep 2021 – Sep 2022**
Transformative Mental Health System in Metaverse, Project Director & Capstone Programmer
- Delivered virtual treatment services by creating immersive environments in Metaverse (VR/AR suites) to mitigate emotional issues.
- Conceived and engineered a game rendering framework using Convex Optimization (Gradient Descent, BFGS) and 3D Path-finding algorithms (A*, Roadmap), integrating GPU parallel computations (Linear Algebra) within refined Unity3D & OpenGL pipelines.
- Collaborated in Agile / Test-driven development cycles, exerted Version Tools (Plastic SCM, Git) to reduce release time by 40%.

National Innovation and Entrepreneurship Competition | Sichuan University, China   **Sep 2020 – Dec 2021**
Automatic Analysis System for Industry Data Anomalies, Pivotal Technician
- Spearheaded the end-to-end development process, managed unit testing and continuous integration, leveraged influxDB to automate the analytical workflow of large-scale data stream on 3,000+ entries (>120GB), reaching an 85% interpretability for data anomalies.
- Enforced NumPy/Pandas, Sklearn/PyTorch/TF and visualization libraries with mixed modeling, cross validation, bootstrap, and time series analysis in Feature Engineering. Built SSL/TLS channels to secure effective decision-making on time-sensitive information.

CERTIFICATES

- ■ Dual National Prizes of College Students' Innovation and Entrepreneurship Competition
- ■ Gold Award of the 7th "Internet+" Competition and Challenge Cup Competition
- ■ Meritorious Winner of the Mathematical / Interdisciplinary Contest in Modelling (MCM/ICM)
- ■ Blue Bridge Cup of National Software and Information Technology Professionals
- ■ 4 Copyrights and 2 Patents for Pioneering Software Intellectual Properties

SKILLS

- ➢ Languages: Mandarin (Native), English (Fluent); Values: Proactive, Ownership, Work Ethic, Organizational, Learning Agility.
- ➢ Coding Languages: C/C++, Java, Python, C#, Go, Swift, SQL, JavaScript, HTML, CSS, OpenGL, Perl, VBA, R, SAS, Rust, etc.
- ➢ Software: Adobe (Acrobat, Ps, Pr), MS Office (Word, Excel macros, PPT), Google Drive, GitHub, Unity3D, Matlab, CAD, SPSS, VMware, Stata, Tibco, Oracle, CRM, CMake, Gradle, 3dsMax, Linux (Red Hat, Ubuntu), IDEA, PyCharm, Visual Studio, etc.