

EDUCATION

University of Waterloo Master of Engineering <i>Electrical and Computer Engineering</i>	Ontario, CA Sep. 2023 - Aug. 2024 (expected)
Xi'an Jiaotong-Liverpool University & University of Liverpool Bachelor of Engineering (First Class Honours) <i>Data Science and Big Data Tech</i> Major GPA: 3.95/4.00	Suzhou, CN & Liverpool, UK Sep. 2019 – Jul. 2023

TECHNICAL SKILLS

Programming	Python, Java, C++, JavaScript, TypeScript
Web Development	React, React Native, Node.js, Express.js, Spring-boot, FastAPI, Django, HTML, CSS
AI/Data	PyTorch, NumPy, Pandas, Matplotlib, Apache Hadoop, Spark
DevOps	Git, Docker, CI/CD, Nginx, Kubernetes, AWS

WORK EXPERIENCE

GoLaxy Data Technology Data Engineer Intern <i>Python, Spark, Scrapy, Numpy, Pandas</i>	Beijing, China Jun. 2022 - Aug. 2022
<ul style="list-style-type: none">• Demonstrated the utilization of the Scrapy framework to construct a robust data layer, capture, and analyze multi-platform information. Successfully crawled and processed over 100,000+ of news articles.• Achieved objects by implementing advanced techniques, including random User-Agent and IP proxies, to overcome anti-crawling measures.• Automated the data collection process by efficiently scheduling extraction and processing tasks with Airflow, leading to improved productivity.	

Summer of Reproducibility (Mentored by Intel)

Experiment Logging System <i>Typescript, React, MongoDB, Node.js, Express.js</i>	May. 2023 – Sep. 2023
<ul style="list-style-type: none">• Streamlined the experimentation process by creating a system that enables convenient testing of experiment iterations in diverse environments, allowing for efficient log recording, analysis, and comparisons.• Designed a decoupled architecture with CLI for streamlined experiment control and GUI as a user-friendly dashboard for visualizing and analyzing experiment results.• Enhanced versatility by incorporating configuration files to allow users to define the specific data to record.• Optimized performance through the strategic use of React hooks, such as useMemo and useRef, resulting in a 30% improvement in rendering efficiency• Provided detailed documentation to assist users in deploying the program locally, ensuring a smooth setup process and efficient utilization of the system.	

SELECTED PROJECTS

Real-Time Friend Chat System <i>Javascript, Typescript, Next.js, React, Redis, MySQL</i>	
<ul style="list-style-type: none">• Developed a real-time chat system using React, Next.js, TypeScript, and Tailwind CSS, which allows users to add friends, send and receive notifications for new messages and friend requests.• Used Redis for caching and MySQL for primary database storage to ensure efficient and reliable data management.• Leveraged Socket.io (WebSocket lib) to synchronize chat and friend requests in real-time, resulting in a remarkable 40% reduction in latency and enhanced user experience.• Deployed the system to production on AWS EC2 with Docker, stored data in MongoDB, and configured load balancing using Nginx.	
Mini Tiktok Backend <i>Java, Spring Boot, AWS, Kubernetes</i>	
<ul style="list-style-type: none">• Developed and deployed a simplified version of TikTok backend using the Spring Boot framework. Implemented core functionalities including video push, video upload, likes, comments, and user following.• Pioneered the integration of Kubernetes on AWS CodePipeline, enabling seamless deployment of microservices using Docker and ushering in a new era of unparalleled service availability, scalability, and performance.	
Contrastive Learning for 3D Medical Image Classification <i>Python, PyTorch</i>	
Published as first author in CMMCA 2022 in conjunction of MICCAI 2022 and awarded Best Paper .	
<ul style="list-style-type: none">• Advanced a powerful multi-task learning framework, incorporating contrastive learning and a gated attention module, resulting in an accelerated 10.5% average AUC improvement.	