

Robert Cronin

Senior Software Engineer

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Technical Strengths

Frontend	MUI, React, Redux, Vite.js, Styled Components
Backend	Express.js, Gin, FastAPI, PostgreSQL
Languages	TypeScript, Golang, Python, SQL, Bash
Cloud	Kubernetes, AWS, Linux, Terraform, Github/Jenkins CI/CD
Other	Docker, REST, gRPC, OpenAI API, LangChain, Jest/Cypress/Locust

Professional Experience

Nov 2022–Present	Senior Software Engineer, LeapForward <ul style="list-style-type: none">○ Converted monolithic architecture to Golang microservices, reducing cluster costs by 80%○ Led development of scalable chat infrastructure for Lucy RAG GenAI Chatbot○ Mentored junior developers and drove GenAI integration to assist human coaches
Apr 2021–Oct 2022	Senior Software Engineer, TikTok (ByteDance) <ul style="list-style-type: none">○ Refactored Retrace platform, impacting 600M+ users across 40+ projects (\$58B annually)○ Led cross-functional team to deliver complete platform refactor in 5 months○ Promoted for significant impact on business efficiency
Apr 2020–Mar 2021	Software Engineer, MatrixAI <ul style="list-style-type: none">○ Developed distributed DevOps platform (MatrixOS) for 1000+ node scalability○ Built CI/CD pipelines for 50+ repositories○ Completed js-polykey library within 6-month deadline, earning performance bonus
Jul 2017–Apr 2020	Software Developer, Fleet Aeronautics <ul style="list-style-type: none">○ Consolidated 20+ individual apps into single web-based client portal○ Increased code maintenance efficiency by 90%

Key Projects

Conduit (LeapForward)	Scalable chat infrastructure handling 1000+ concurrent users, 10k+ messages/second/node
ComposeIDE (TikTok)	In-browser IDE with real-time collaboration, impacting two major content safety platforms
Hawk (TikTok)	Content review platform serving millions of daily internal users, used across thousands of business lines in all ByteDance commercial apps
Turl-Go (TikTok)	Thrift-cURL CLI tool used by thousands of backend developers across 40+ projects

Education

2024	M.S. Computer Science (Machine Learning), Georgia Institute of Technology
2018	Graduate Certificate in Computing, University of Southern Queensland
2014	B.E. Mechanical and Aerospace Engineering, University of Queensland

Career Objective

Seeking challenging technical problems in Machine Learning, Distributed Systems, and Cloud Computing with a team of talented engineers.