

Contact

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(LinkedIn)

Top Skills

OpenCV

Communication

Startups

Certifications

edX Verified Certificate for Bitcoin
and Cryptocurrencies

edX Verified Certificate for
Blockchain Fundamentals

edX Verified Certificate for
Blockchain Technology

Rongjun GENG

Software Engineer

San Francisco Bay Area

Summary

I'm a Software Engineer & Electronics Engineer with a strong foundation in Linux backend development, embedded systems, and infrastructure engineering. I specialize in building high-performance, scalable solutions that connect the worlds of hardware and AI-enabled software.

With 20+ years of experience across C/C++, Python, FPGA/EDA, and SDR platforms, I've delivered production-grade systems—from real-time firmware and device drivers to full-stack cloud applications and LLM-integrated AI services.

At 4G ENG, INC, I've led Agile-driven development of backend and infrastructure systems. I've designed CI/CD pipelines, automated deployments, and integrated multi-model LLMs (OpenAI, Claude, DeepSeek, Gemini) for intelligent automation and diagnostics. I also work extensively with REST/gRPC APIs, PostgreSQL, Docker, Kubernetes, and AWS.

Previously, as Co-Founder of MicroEmbedded Software (Beijing) Co. LTD, I architected Software-Defined Radio (SDR) platforms and led development for OpenBTS-based systems adopted at scale. My work influenced national protocol and telecom regulations in China.

I'm deeply passionate about open-source innovation, systems optimization, and pushing the limits of compute through LLMs, AI infrastructure, and hardware-software co-design.

Key Skills & Focus Areas

✓ LLM Integration & AI Ops: OpenAI, Claude, Hugging Face, LangChain, RAG, QLoRA

✓ Backend & Infra: Linux, C/C++, Python, FastAPI, PostgreSQL, MongoDB

✓ DevOps & Cloud: Docker, Kubernetes, Terraform, AWS/GCP, CI/CD pipelines

- ✓ Embedded Systems: Xilinx Vivado, GNURadio, USRP SDR, Verilog/VHDL
- ✓ Networking & Security: TCP/IP, WebSockets, SELinux, system hardening

I'm open to opportunities in LLM Engineering, Backend Infrastructure, and AI/DevOps roles. Let's connect if you're working on innovative systems at the intersection of AI and hardware!

Experience

4G ENG, INC

Software Engineer

August 2017 - Present (7 years 10 months)

San Francisco Bay Area

- Developed embedded Linux applications and real-time backend pipelines in C/C++ and Python.
- Integrated LLM APIs into internal automation pipelines for AI-assisted diagnostics and documentation.
- Designed REST/gRPC backends for sensor platforms using PostgreSQL and Redis.
- Automated deployments using Docker, GitHub Actions, and Jenkins for reproducible builds.
- Conducted performance tuning and low-level debugging using perf, gdb, valgrind.
- Built AI wrappers to allow multi-model response handling from GPT, Claude, Gemini, etc.

MicroEmbedded Software (Beijing) Co. LTD.

Electronics & Software Engineer

September 2009 - August 2017 (8 years)

Beijing, China

- Designed Linux-based embedded firmware for RF and telecommunications systems.
- Optimized network protocols and built low-latency data transmission systems.
- Developed device drivers and kernel modules for custom hardware.
- Led the Message Management project that influenced national protocol and legislation.
- Built prototypes and validated designs for SDR applications, integrating Xilinx FPGA and GNU Radio.

- Assisted in EMC testing and PCBA designs to optimize production efficiency.
- Used Bash & Python scripting for automation and system management.

Australian Conveyor Engineering Pty. Ltd.

Electronics Engineer

August 2000 - August 2009 (9 years 1 month)

Somersby, NSW Australia

- Developed and maintained industrial automation and control systems.
- Worked with SCADA, PLCs, and real-time monitoring systems.
- Engineered intelligent sensing, positioning, and navigation systems for coal mine robots.
- Successfully expanded the China branch, driving over 5 billion yuan RMB in sales (2006 ~ 2008).

Education

BloomTech

Full Stack Web Development Certification, Full Stack Web Developer,
Computer Science · (August 2021 - June 2022)

Xi'an Jiaotong University

Bachelor of Engineering - BEng, Electrical and Electronics Engineering