

Peter Hua

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Experience

Software Developer, Creator

2023 – present | Remote

Tinker [🔗](#)

- Created an open-source, self-hosted, backend-as-a-service (BaaS) that automates configuration and deployment on AWS, with a companion database editor dashboard
- Published an npm CLI that automates deployment and teardown of AWS infrastructure
- Designed and implemented Tinker's AWS infrastructure including networking and security using CloudFormation, VPC, EC2
- Centralized TLS certificate management and HTTPS communication between clients and backend servers by TLS offloading (Route53, ALB)
- Secured Tinker through authentication with JWTs and authorization with PostgreSQL roles
- Engineered automatic provisioning of PostgreSQL and an API layer in EC2 instances using Docker
- Developed RPCs for dashboard SQL queries (DDL and DML)
- Authored a case study on Tinker's problem domain, architecture, challenges, and design decisions

Controls Engineer

2017 – 2021 | US, Japan, China

Birket Engineering

- Designed, programmed, installed, and commissioned the software/hardware behind life-safety ride & show control systems in theme park attractions enjoyed by millions of guests annually
- Integrated technologies across audio/video, lighting, show action equipment, animated figures, and special effects, with live performers
- Defended designs to Engineering Safety and government auditors for public opening approval
- Trained technical services staff on system operation, troubleshooting, and maintenance

Electrical Engineer (Licensed P.Eng)

2012 – 2017 | Canada

Enhanced Engineering (E2) Consulting

- Designed, programmed, and managed process control automation projects (up to \$1M)

Engineer/Developer (Co-op Student)

2009 – 2011 | Canada

Ericsson, Nokia

- Created test scripts, diagnosed circuit board issues, and ran network traffic tests for edge routers

Skills

Languages & Frameworks

Node.js/Express, Ruby, Sinatra, React, SQL

Tools

PostgreSQL, MongoDB, Docker, NGINX, Wireshark

Cloud

AWS (CloudFormation, EC2, ALB, S3, VPC, IAM), DigitalOcean (Droplets)

Education

BASc Electrical Engineering with Distinction

2007 – 2012

University of British Columbia

Electrical/Computer engineering coursework

Software Engineering, Capstone Program

2022 – 2023

Launch School

Mastery-based curriculum of software engineering fundamentals. launchschool.com/employers [🔗](#)

Professional Engineer License

2017

APEGA