Spencer Hommel

781-690-5770 | spencerhommel@gmail.com | shommel.com | linkedin.com/in/spencerhommel

SKILLS

Python | JavaScript | TypeScript | Rust | Django | React | PostgreSQL | Docker | Bitcoin/Blockchain | GitHub Actions | AWS | REST APIs | CI/CD | ETLs | Apache Airflow | Kubernetes | Full-Stack Web Dev | Freelance Web Projects | Claude & ChatGPT API Integration | Git | Linux | Unit & Integration Testing

WORK EXPERIENCE

FREELANCE SOFTWARE ENGINEER   FEB 2024 – PRESENT
SELF EMPLOYED
- Independently managed complete contract lifecycle, from initial scoping and negotiation through implementation and delivery, across diverse software projects
- Built secure, authenticated web platform for remote desktop access utilizing Django, PostgreSQL, and XPRA
- Delivered comprehensive software solutions spanning embedded microcontroller programming, Godot game engine scripting, full-stack web applications, and web scraping automation tools

SOFTWARE ENGINEER   MAY 2023 - JAN 2024
GALAXY DIGITAL
- Maintained and enhanced production infrastructure supporting large-scale hardware operations, integrating with 100,000+ remote devices across distributed networks
- Engineered high-performance, thread-safe Python and Rust code for network device management and coordination, orchestrating real-time data collection through 30+ automated CRONjobs
- Designed comprehensive Grafana dashboards and implemented PagerDuty alerts for system monitoring and performance analytics, reducing site outages and disruptions by over 90%

SOFTWARE ENGINEER   AUG 2020 - NOV 2022
CUSTODIA BANK
- Executed full-stack development for regulated banking platform supporting both fiat and digital assets, using Django, React, and PostgreSQL
- Architected critical custody infrastructure with seamless Bitcoin and Ethereum node integration
- Authored comprehensive technical documentation and bi-annual regulatory risk assessments for federal compliance, covering 300+ security protocols, custody workflows, and infrastructure reliability standards

SOFTWARE ENGINEER   SEP 2018 - AUG 2020
FIDELITY CENTER FOR APPLIED TECHNOLOGY
- Developed and tested innovative Bitcoin cold storage protocol leveraging pre-signed transactions and deleted private keys, advancing FCAT's early custody research and open-source initiatives
- Co-authored two research papers examining advanced Bitcoin transaction controls and secure vault architectures

PROJECTS AND PUBLICATIONS

WHOWINS.GG   JUL 2025
- Developed a fun web app for predicting League of Legends match outcomes using team composition data from the Riot Games API

BITCOIN COVENANTS: THREE WAYS TO CONTROL THE FUTURE   JUN 2020
- Co-authored research paper exploring Bitcoin covenant mechanisms for enhanced transaction control and security

CUSTODY PROTOCOLS USING BITCOIN VAULTS   MAY 2020
- Co-authored research paper detailing a novel cold storage methodology using deleted private keys and pre-signed transactions

AN EXPLORATION OF MENTAL HEALTH STIGMA   FEB 2019
- Authored a comprehensive analytical paper examining evolution of mental health stigma in 75,000 New York Times articles over 150 years

EDUCATION

SUFFOLK UNIVERSITY   SEP 2019
BACHELOR OF SCIENCE IN COMPUTER SCIENCE