

# Tyron Rieckmann

Software Engineer

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Phoenix, AZ

## Skills

### Web languages

- TailwindCSS
- Svelte/SvelteKit
- Node.js/Koa
- PHP
- SQL
- WebGL

### System languages

- C
- C++
- Rust
- Java
- C#
- Python

### Scripting languages

- Bash
- Batch
- Lua

### Misc software

- Docker
- AWS
- MySQL
- PostgreSQL
- Redis
- Kubernetes
- Linux/Git

## Education

**B.S. Computer Science / ASU**  
DECEMBER 2022

- pwn.college pupil
- Linux Users Group alumni

## Experience

**Software Engineer / Moog Inc.**

2023-PRESENT

- Designed custom QEMU device for FPGA and custom hardware simulation
- Rewrote CPU silicon and ECC RAM initialization assembly routines, cutting boot time in half
- Ported VxWorks drivers to Linux
- Designed and implemented new Linux kernel modules
- Adapted YAFFS to dramatically improve mount speed
- Created unit and integration tests for SpaceWire hardware and drivers
- Built CI pipeline for Debian and Yocto-based OS images
- Leveraged Docker for reproducible build environments
- Created computer vision demo for conferences

**Manufacturing Technician / Intel Corp.**

2018-2023

- Collected, analyzed, and evaluated wafer defect data on TEL Clean Track Lithius i+ and Lithius Pro V-i platforms in the resist-coating portion of the lithography process
- Trained new full-time employees and interns
- Improved automated processing and analytics systems necessary for efficient day-to-day sustaining operations

**AWS Infrastructure Engineering Consultant / GO AV**

2020-2021

- Advised company founder on optimal deployment solutions using Amazon Web Services (AWS).
- Deployed numerous video conferencing relays and Windows Server instances, and networked them together for corporate customer livestreams
- Created unattended installation Bash scripts for the company to use for additional future deployments

**Full Stack Web Developer / Self-employed**

2017-2018

- Rebuilt frontend and backend for online homework/quiz system
- **Redesigned MySQL database schema, significantly improving query speed**
- Numerous usability and security improvements

# Projects

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**Homelab Server** / Personal  
2023-PRESENT

**License Plate Ecommerce Website** / ASU Capstone Group Project  
2021-2022

*Stack: Node.js, Koa, **PostgreSQL**, Caddy Server, TailwindCSS*

- Researched full stack
- **Designed PostgreSQL database schema**
- Designed and built REST API
- Manually configured all server and security software on a bare Ubuntu Server instance

**Meatup** / ASU Project  
2022

*Stack: iOS/Xcode/Swift, Node.js, Koa, **PostgreSQL**, Caddy Server*

- **Designed PostgreSQL database schema**
- Designed and built REST API
- Created iOS app UI and logic