

Christopher Peplin

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Vanta

2023 to present
Automating Compliance
Pittsburgh, New York City & SF

Staff Software Engineer, Core Platform

I lead the team responsible for cloud infrastructure and networking (AWS, Cloudflare, Terraform), observability (Datadog), async jobs (BullMQ), databases (MongoDB, MySQL), developer experience (Codespaces), CI/CD (GitHub Actions), and compliance and security for engineering systems. We steward Vanta's web app monolith and common TypeScript service scaffolding, defining requirements and building guardrails to protect these shared resources. I am the engineering lead for Vanta's FedRAMP authorization efforts, previously led the development and launch of our APAC region, and unified our network edge using Cloudflare without any downtime.

Zipline

2022 to 2023
Autonomous Drone Delivery
Pittsburgh & San Francisco

Software Engineer & Tech Lead, Avionics Software

As the technical lead and manager for Avionics software, I led my team in building and maintaining the foundational infrastructure powering Zipline's delivery drones including firmware (C++), embedded Linux (Yocto), sensor drivers (Rust), IPC and data logging, networking, CI/CD, build systems and cloud service integrations (Python).

AtoB

2021 to 2022
Trucking & Logistics FinTech
Pittsburgh & San Francisco

Software Engineer, Infrastructure

On the fledgling engineering team at this Series A start-up, I led backend development of a payroll product (Ruby), built common service deployment and observability infrastructure (Heroku, Datadog), scaled the data platform for an ML-based risk analysis and fraud detection engine, and introduced event-driven architecture using Sidekiq. I introduced lightweight engineering design reviews and a formal incident response process to mature our engineering culture and support rapid growth.

Aurora Innovation

2020 to 2021
Self-driving Trucks
Pittsburgh

Senior Staff Software Engineer, Infrastructure

Following Aurora's acquisition of Uber ATG, I took the opportunity to pivot from management back to a hands-on software engineering role. My team and I built the first iteration of a web-based remote assistance platform for Aurora's self-driving trucks (C++, Go, WebRTC, Terraform), and led development of the vehicle data logging system (C++, Python) and network infrastructure (C++, Go, OpenVPN, Tailscale, AWS, Terraform).

Uber Advanced Tech. Group

2016 to 2020
Self-driving Cars & Trucks
Pittsburgh & San Francisco

Software Engineer to Senior Engineering Manager

Starting as a software engineer building sensor drivers (C++, Python) and the embedded Linux OS for Uber's autonomous vehicle platforms, I grew to be a tech lead and manager. My team's scope expanded to include software and firmware deployment, sensor calibration, fault management, and vehicle networking, and I eventually took a senior manager role supporting five sub-teams under the umbrella of Vehicle Platforms.

Stratos Card

2014-2015
Embedded Hardware FinTech
Ann Arbor, MI

Lead Software Engineer, Embedded & Backend

Served as software engineer, tech lead and project manager responsible for the Stratos Card firmware, end-of-line manufacturing testing, Bluetooth LE API, REST API and product analytics. The Stratos Card was a credit card-sized embedded system designed to replace magnetic stripe cards with a smartphone-based digital alternative.

Ford Motor Company

2011-2014
openxcplatform.com
Dearborn, MI

Software Research Scientist

Designed, implemented and released an open source hardware and software platform for using data from vehicles in mobile apps. Promoted open data within Ford and the automotive industry through international workshops and speaking engagements.

Carnegie Mellon University

2009 to 2011. Pittsburgh, PA

M.S. in Information Networking

University of Michigan

2005-2009. Ann Arbor, MI

B.S. in Computer Science