Christopher Peplin

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Employment

September 2020 - Present
Aurora Innovation
Pittsburgh, PA

Senior Staff Software Engineer

At Aurora, I pivoted from management back to a software engineering role. First, I joined a small team to build our web-based remote assistance platform for self-driving vehicles. This was a rapid-fire period of learning as I refreshed my knowledge of the latest tech, including modern C++, Go, Python, WebRTC, TypeScript, React & Kubernetes. Aurora acquired my former employer in early 2021, and I advised on many technical and organizational topics to support a successful merger. I am now helping design, build and operate our vehicle data logging system (C++ and Python) and our vehicle networking infrastructure (C++, Go, AWS, Terraform).

Jan. 2016 - September 2020
Uber ATG
Pittsburgh, PA

Software Engineer to Senior Engineering Manager

I began my self-driving vehicles career as a software engineer in Onboard Integration, supporting vehicle, sensor interface, and onboard OS development for ATG's many autonomous platforms. I grew into the tech lead and manager for the team, and continued to contribute as a hands-on software engineer and technical architect. Our scope broadened to include software and firmware deployment, sensor calibration, fault management, and mobile networking; my role evolved into a second-line manager supporting 5 teams under the umbrella of Vehicle Platforms. Separately, I led the implementation of recommended actions from an internal Safety Review Group, an 18-month effort that improved our sensor calibration processes and system health monitoring capabilities across the company, and set up long-term ownership to ensure safe vehicle testing in the future.

April 2014 - December 2015
Stratos Card, Inc.
Ann Arbor, MI

Lead Software Engineer

A cross-functional software engineer, team lead and project manager responsible for the Stratos Card firmware, Bluetooth API, mobile apps, backend HTTP API, web frontend and end-of-line manufacturing test rig for our partners in China. This consumer electronics product aimed to replace magnetic stripe cards with a smartphone-based, digital alternative.

July 2011 - April 2014
Ford Motor Company
Dearborn, MI
openxcplatform.com

Software Research Scientist

Designed, implemented and released OpenXC to the public, an open source hardware and software platform for using data from vehicles in custom applications. Evangelized open data and open source software in the automotive industry through international workshops and speaking engagements.

Education

2009 - 2011
Carnegie Mellon University
Pittsburgh, PA

M.S. in Information Networking

Distributed Systems, Large Scale Internet Services & Data Center Operations, Virtualization, Data Mining

2005 - 2009
University of Michigan
Ann Arbor, MI

B.S. in Computer Science

Concurrent & Parallel Systems, Databases, Web Applications, Artificial Intelligence