Tom Whipple

mail@tomwhipple.com • 612-220-1465 • 139 Wichita Rd, Lyons CO 80540

Summary

Seasoned software engineering leader with 10 years experience in management and more than 20 years in engineering with a proven record of delivering and scaling products.

Professional Experience

Software Engineer, Meso: 2022 - 2023

Built a crypto payment on-ramp backend using Go. Led the architecture for the risk system and participated in overall system architecture and API design.

Sr. Engineering Manager, PayPal - San Jose, CA and Austin, TX: 2012 – 2020

Payment processor Braintree was acquired by PayPal in 2013. Shortly afterwards I joined the Braintree organization.

I led an organization of 20 people split into three teams, responsible for building and maintaining all of the alternative payment method processing (including PayPal and Venmo) within the Braintree system. During this time we:
- Grew transaction volume from the low millions to more than two billion dollars per month.
- Collaborated across the company to drive reduction of API errors and lower spurious declines.
- Grew a team of 4-5 engineers into a larger organization of 20 with external hiring and attracting talent from within the company.
- Developed and launched a new GraphQL API.

I personally:
- Contributed directly to the Ruby on Rails codebase.
- Worked with internal solutions engineers and met with end customers to ensure the right solution was implemented.
- Presented to executive leadership to drive company wide focus on API quality.
- Architected novel solutions to problems, two of which were patented.
- Served as the site lead for Braintree at PayPal's Austin site, leading the effort to bridge the gap between the PayPal enterprise and Braintree startup cultures.

Principle Software Engineer, card.io - San Francisco, CA: 2011 – 2012

card.io was the first mobile computer vision solution to allow credit card entry by camera. It was acquired by PayPal in 2012, and open-sourced later that year. Although the product hasn't been supported for many years, it continues to be used by major brands today.

I served as the technical lead for the Android SDK and fraud control efforts as well as making contributions to the computer vision backend and iOS SDK, using Java, Objective-C and Python.

Founder, Smartovation Technologies - Ventura, CA: 2009 – 2011

I founded a contract development firm specializing in development of mobile apps. Clients included Sprinkles Cupcakes, Emirates Airlines, and more.

Computer Engineer, Naval Air Systems Command - Point Mugu, CA: 2007 – 2009

NAVAIR is the Naval Air Systems Command, a civilian agency within the US Navy, responsible for procurement of aircraft and airborne weapons systems. While there I:

- Developed Hardware in the Loop (HiL) test capability for an ultra-wideband digital RF receiver.
- Lead Technical administrator for two SBIR technology development grants involving digital ultra-wideband RF receivers.
- Developed a maximum likelihood algorithm for classifying radar signals.
- Wrote real-time control software for custom built RF signal generation hardware for a HiL environment, including using a logic analyzer to debug a VxWorks device driver.

Graduate Technical Intern, Intel - Hillsboro, OR: Summer 2006

I designed and created an open source application test suite for the 1.0 release of Linux utility xdg-utils. As part of the freedesktop.org Portland project, the xdg-utils are designed to provide a set of controls to providers of Linux software that work regardless of distribution or desktop environment using standard Linux shell tools.

Software Engineer, Nistevo - Eden Prairie, MN: 2000 – 2003

- Developed and maintained a Makefile driven build and test system.
- Developed a new test framework for QA.
- Undertook a variety of build automation tasks in support of product integration.
- Served as lead developer for business reporting.
- Administered an enterprise integration package during the go-live period. Created automated monitoring and recovery tools in Perl.

System and Network Administrator, Znet Telecom - Minnesota: 1997 – 2000

I lead network & system administration for a growing rural internet provider.
- Installed and maintained web, mail, FTP, NNTP, and dialup services on Linux.
- Migrated legacy servers from Windows to Linux.
- Installed and maintained dialup and WAN equipment.
- Consulted to customers.
- Built software for customer support to automate account maintenance in PHP.

Education

University of Minnesota: Master of Science – Computer Science, 2007

Studies included: Computer Vision, Machine Learning, Robotics

University of Minnesota: Bachelor of Science – Mathematics, 2005

Studies included: Statistics, Graph Theory, Mathematical Logic, Linear Programming
Member of 2nd place 2005 solar vehicle team, where I worked on RTOS to control the car, led race strategy.

Patents

- US9858405: Systems and methods for authenticating a user based on a computing deviceSystems and methods for authenticating a user based on a computing device
  Issued Jan 2, 2018
- US20220156750: Conditional Transaction Pre-Approval
  Pending. Filed Jan 31, 2022

Programming Languages & Frameworks

C/C++/Objective-C, Go, Java, Python/Flask/NumPy, Ruby/Rails, Objective-C, SQL, OpenCV, Linux, IP networking