Matthew **Bachmann** Lead Software Engineer | Engineering Manager

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A passionate and experienced developer who is constantly striving to improve and gain a deeper understanding of the systems and people he works with. Gives back to the wider development community though open source contributions and knowledge sharing. Works best with highly collaborative teams and enjoys engaging with the wider organization. Is most valuable when able to combine technical skills with a broad understanding of the business and the organization.

📑 Skills

Languages Python, Java, SQL, JavaScript, TypeScript, HTML, CSS, Bash, Regular Expressions

Starlette, Flask, React JS, GraphQL, Spring, Spring Boot, Finagle, Ember.is Frameworks

Databases PostgreSQL, Redis, MySQL, Cassandra

Development Tools IntelliJ IDEA, Git, Vim, VSCode

> **Build Tools** Gradle, Maven, Poetry, Pip, Virtualenv, Tox, Travis, Jenkins, Github Actions

Kubernetes, Kafka, Docker, Zookeeper, Finagle, Thrift, Prometheus, Grafana, Kibana Distributed Systems Technologies

> **Cloud Services** AWS, Heroku, Google Compute Engine



EXPERIENCE

Present October 2021

Master Software Engineer At The Manager Level, Capital One Finance

- > Tech Lead for team responsible for building financial products.
- > Worked with leaders from Lola and Captial One to transition the Lola team and to shut down parts of Lola's operation.

Python Flask PostgreSQL AWS

October 2021 May 2019

Engineering Manager, Lola.com (Acquired by Captial One Finance in October 2021)

- > Lead a 7 person engineering team by establishing a Scrum process and building out a suite of tools to streamline our travel agents workflows. These tools and workflows allowed agents to handle a 300% increase in booking volume.
- > Tapped to take over the recently launched spend management platform built after Covid-19 forced a pivot of the business. Lead a team of 6 to to build out functionality as the spend customer base increased 400%. This product was the catalyst for our eventual acquisition by Capital One.
- > Established a system for individual contributors across teams to discuss architectural issues and lobby management to level up Lola's Technical infrastructure.
- > Championed, managed, and participated in the project that successfully ported all our Python 2 code to Python 3 ensuring the future maintainability and health of the entire system.

Python | Javascript | Starlette | Flask | SQLAlchemy | PostgreSQL | Redis | Graphql | React | AWS | Kubernetes |

May 2019 January 2016

Lead Software Engineer, FITBIT (SEPTEMBER 2018 - MAY 2019)

- > Lead his team's effort to transition several services from Softlayer into Google Compute Engine. Documenting and spreading the knowledge gained to enable teams following them to handle their move more efficiently.
- > Designed and built tooling to analyze device battery life, prevent warranty fraud, and improved customer support by building visibility into products.

Senior Software Engineer, FITBIT (MARCH 2017 - SEPTEMBER 2018)

- > Assisted platform teams in refactoring central domain models to enable the transition from a monolithic system to microservices.
- > Managed one of the cross team, multi national, cross functional projects to ensure Fitbit's compliance to the EU's GDPR law.

Software Engineer, FITBIT (JANUARY 2016 - MARCH 2017)

- > Spearheaded the commerce platform SOX compliance efforts. Worked with auditors and stakeholders to ensure engineering provided appropriate audits and controls. This included a complete revamp of deployment pipeline and the authentication mechanisms of the commerce backend.
- > Built full stack functionality to support product sales on the Fitbit.com commerce platform. Including but not limited to: product warranties, chargeback fraud prevention, and product launch support.

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Java | Python | Spring | Ansible | Mysql | Cassandra | Zookeeper | Prometheus | Kibana | Grafana | Kafka | Finagle
Thrift Google Compute Engine JavaScript Ember.js JSP Jenkins
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December 2015 October 2012

Software Engineer, CLOUDLOCK

- > Developed compliance and DLP applications on Google's App Engine and Amazon's AWS cloud platforms.
- > Built an internal service that scans millions of items per day for PCI, PII, Login Credentials and other information companies want to track in their various cloud environments.
- > Developed features around several of Google's APIs including Drive, the Admin SDK, Google+ and

Python Google App Engine AngularJS Java pytest PDFBox Apache POI Librato Flask Django Postgres Jinja Jenkins

September 2012 June 2011

Software Engineer, CRUNCHTIME! INFORMATION SYSTEMS

- > Developed and maintained a web application to assist restaurant managers in cutting costs by managing labor and inventory.
- > Implemented several reports pages and ported legacy Perl code to modern Java.
- > Assisted in transitioning from an Ant based build to a Maven build.

Java Perl Spring JavaScript jQuery MyBatis Oracle Database JSP



EDUCATION

Worcester Polytechnic Institute Master Of Science Computer Science

2009 **Dickinson College** Bachelor Of Science (Honors) Computer Science



HIGHLIGHTED TALKS

TRANSITIONING FROM DEVELOPING SOFTWARE TO DEVELOPING PEOPLE: A FIRSTHAND EXPERIENCE

PyCon 2020

In this talk I intend to talk specifically about the role of a manager of a single team. I will go over the types of problems a manager is responsible for and discuss the value a good manager can bring to a team/organization. I will help attendees understand the perspective of their current manager and help them decide if management is something they would be interested in trying out themselves.

BETTER TESTING LESS CODE: PROPERTY BASED TESTING WITH PYTHON

PyCon 2016, QCon 2017

Standard unit tests have developers test specific inputs and outputs. This works, but often what breaks code are the cases we did not think about. Property based testing has developers define properties of output and has the computer explore the possible inputs to verify these properties. This talk will introduce property based testing and provide real world examples and patterns.

DIFF COVER PyCon Lightning talk 2015

Diff Cover is a package I maintain which allows teams to to improve test coverage and code quality over time by running tools over diffs rather than the entire project. It is currently downloaded over fifty-five thousand times per day. In this PyCon lightning talk I introduce the library by using it to assist Batman with his Batputer.