

# Matthew Barga

Nationality: USA  
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**SUMMARY** Curious Python engineer with more than 8 years of experience in web development.  
Some things I believe in: API first design, scalable microservice architecture, cloud native deployments, CLEAN code practices.

**SKILLS**

**Languages:** Python; Some exposure to Java, Scala, Go  
**Python Ecosystem:** Flask, Django, FastAPI, Celery, numpy, pandas  
**Cloud and Devops:** AWS, GCP, Kubernetes, Docker, Terraform, CircleCI  
**Data:** BigQuery, Redshift, Apache Beam, Kafka  
**Other:** SQL, Elasticsearch  
*Source code samples are available on my github (username: mbarga)*

**EXPERIENCE**

**Senior Python Engineer** - Cookpad Global, Bristol, UK ..... **Dec 2021 - Present**

- Deliver new features to our global web portal users (Django, FastAPI)
- Designed and implemented analytics dashboards interfacing with our data warehouse (pandas, Opensearch, Django)
- Deploy and manage Kafka infrastructure including defining Avro schemas

**Python Engineer (Backend)** - commercetools, Berlin, Germany ..... **July 2018 - Dec 2021**

- Designed and built scalable image based product search endpoint utilizing user uploaded images as input
- Lead initiative to build a data analytics team tasked with establishing ETL pipelines to support internal analytics
- Design, build, and deploy scalable machine learning APIs for the core platform (Python3/Flask)

**Data Scientist** - AXA Life, Tokyo, Japan ..... **May 2016 - July 2018**

- Data scientist with AXA Life Insurance (Python, SQL, Spark, Hadoop, Hive)
- Developed cross-selling models that realized up to 4x product uplift to meet target KPIs
- Implemented and maintained ETL pipelines on a group-wide datalake platform to ingest, clean, and generate structured data tables from raw text sources
- Generated reports on findings based on statistical analyses of business data

**Software Engineer (Fullstack)** - Rakuten, Tokyo, Japan ..... **Apr. 2015 - May 2016**

- Developer on Rakuten DSP digital marketing web service (Java/Spring, Javascript)
- Extended application to integrate with new third party APIs for batch and real-time ad data ingestion
- Implemented new endpoints for the core REST API
- Ad-hoc reporting and ETL pipeline for 50TB of digital clickstream data (Hadoop, Hive, Spark)

**Software Engineer (Backend)** - Capy, Tokyo, Japan ..... **Dec. 2013 - Mar. 2015**

- Developed web application for an internet security startup in Tokyo (Python/Django, 300k requests/day)
- Brainstorming and implementation of enhancements for the core captcha tool resulting in a 10% decrease in undesired captcha successes by spam bots

**EDUCATION**

**The University of Tokyo**, Tokyo, Japan ..... **Sep. 2014**  
*Master of Science - Computer Science*

**Purdue University**, West Lafayette, Indiana ..... **May 2011**  
*Bachelor of Science - Computer Engineering; Minor in Mathematics*