# Brandon Willett

## Education

#### **UNIVERSITY OF ROCHESTER**

- ♦ Graduated in 2018
- ♦ B.S. in Computer Science (3.82)
- ♦ B.A. in Mathematics (3.80)

### Skills

#### **BACKEND**

- ♦ Go, Python, Java, Scala
- Message Queues (Kafka, RabbitMQ)
- ♦ DAG Pipelines (Airflow, Luigi)
- Transactional Databases (Postgres, Cass)
- Analytical / Columnar Databases
- Database Sharding
- ♦ Caches (Memcached, Redis)

#### **PLATFORM**

- Version Control (Git)
- ♦ CI/CD (Github Actions, Gitlab)
- Telemetry (Prometheus, Datadog)
- Containerization (Docker, Containerd)
- ♦ Build Tools (Rake, Bazel)
- Infra as Code (Cloudfornation, Terraform)
- ♦ Reverse Proxies (NGINX, HAProxy)
- ♦ Load Balancers (L4, L7)
- Service Discovery (DNS, Consul, Envoy)

#### **CLOUD**

- AWS (ALB, NLB, EC2, RDS, S3, Lambda)
- ♦ GCP (GLB, GCE, GCS, Cloud SQL)
- Azure (ALB, VMSS, ABS)
- Kubernetes (ask me about any resource)

A young New-York-based developer with experience in platform dev. Always believing that any problem can be overcome with kind communication, a good sense of humor, and just persisting everything to S3.

## Experience

**ACTIONIQ** 

New York, NY

**Distributed Systems Engineer** 

Jun 18 - Present

- Designed, advocated for, and implemented our strategy for autoscaling query execution on EC2, reducing our AWS bill by more than 50%
- Drove scalability improvements for the OSS job scheduling platform Luigi, and contributed some of that back upstream
- Maintained the Prometheus cluster (later, Datadog) and led internal talks and workshops on best practices around metrics & observability
- Enabled dynamic configuration and artifact discovery
- Brought some of the first Terraform modules to AIQ, used them to build the first version of our streaming ingest platform using IaC

**EDU.CHAT** 

New York, NY

**Software Engineering Intern** 

Jun 17 - Aug 17

- Worked closely with a team of three other engineers, using JIRA and Git, to create a chat bot which classified and answered student questions
- Developed, refined, tested and integrated the new NLP question-matching model with the overall Edu.Chat platform
- Learned Python implementations for message passing, parallelization and task queue systems to distribute the workload (like Celery and Redis)

#### UR CHEMICAL ENGINEERING DEPT

Rochester, NY

Research Assistant

Sep 16 - May 18

- Created and iterated upon a web app with rapidly-changing requirements, performing Markov chain statistic analyses on time-series datasets
- Hosted on EC2, using Flask with NumPy and Pandas for data visualization

#### **UR EVENT & CLASSROOM MANAGEMENT**

Rochester, NY

Student Supervisor

Sep 14 - May 18

- Trained, managed, and communicated with the large student staff
- Created and self-hosted several small web-based tools to help students log and visualize phone call data – these are still in use now