

TECHNICAL EXPERIENCE

**Klaviyo** Jun 2024 — Present  
*Back-end Software Engineer / Events Pipeline* Boston, MA

- Enhanced a distributed events pipeline handling 5B+ events daily (~50K QPS), improving P99 latency by 7% for hundreds of thousands of customers
- Directed migration of a critical Kafka cluster to a dedicated team, coordinating documentation, scripts, and training to enable independent ownership, boost stability, and reduce Kafka-related incidents by ~40%
- Optimized a high-throughput pipeline component with asynchronous Python, Redis, and DynamoDB, using batched requests to improve scalability and cut infrastructure costs
- Developed Airflow/EMR tooling to identify and backfill missing downstream events, reducing engineer recovery time, and preventing customer-facing data inconsistencies

**Kyruus** Mar 2019 — Feb 2023  
*Senior Full-stack Software Engineer / API* Boston, MA

- Delivered the v2 API for our next-generation platform, enabling customer integrations with provider data

*Senior Back-end Software Engineer / Pipeline Operations*

- Created tools to automate the customer onboarding process, reducing engineering costs and accelerating delivery time
- Architected and implemented a Jenkins Pipeline-based system to replace a head-of-line blocking Jenkins job workflow, improving pipeline reliability, concurrency, and retryability
- Reduced load on internal and external APIs by 50% by eliminating redundant data retrieval steps in the pipeline process

*Back-end Software Engineer / Customer Onboarding*

- Worked closely with new customers to onboard their providers onto our pipeline
- Standardized customer data, reducing nightly pipeline failures by ~20%

**PrimePay** Jan 2018 — Mar 2019  
*Back-end Software Engineer / Tax Filing* West Chester, PA

- Refactored a legacy tax filing engine to manage and file payroll taxes for tens of thousands of clients
- Designed data visualization and data conversion tools for state and federal tax forms and files (PDF, TXT, XML)

SKILLS

Languages	Python, SQL, NoSQL, JavaScript, Bash, C#
Frameworks & Libraries	Pydantic, FastAPI, Django, Leaflet, LINQ
Platforms	AWS (EC2, RDS, EMR), PostgreSQL, MySQL, MongoDB
Tools	Git, JIRA, Kafka, Redis, Docker, Kubernetes, Terraform, Airflow, Jenkins, $\LaTeX$
Concepts & Practices	REST API, RPC, Event-Driven Architecture, Object-Oriented Design, Test-Driven Development

PROJECTS

Arcavios — Building a collection of tools for managing Magic: the Gathering data	Jun 2023 - Present
Streamlabs Chatbot — Built a plugin to support automatic handling of picture-in-picture replays during livestreams	Spring 2022
G-Player Visualization Tool — Research Assistant for Dr. Alessandro Canossa	2015 — 2016
Cell Phone Intervention Trial for You (CITY) — Research Assistant for Dr. Stephen Intille	Summer 2013

EDUCATION

Bachelor of Science in Computer Science, Northeastern University

ACTIVITIES AND INTERESTS

Volunteer Fire Lookout	2024
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