David Park Junior Back-End Engineer

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PROFILE SUMMARY

- **Junior Back-End Engineer** with **2 years** on the **Identity team** of a **retail brokerage**, building **login, device verification and fraud services**, after 4 years as a **financial analyst** and a coding bootcamp.
- Works in languages (**Go**, **Python**, SQL), APIs (**gRPC**, REST), data stores (**PostgreSQL**, **Redis**), messaging (**Kafka**), infrastructure (**Kubernetes** on AWS) and testing (**pytest**, Go's testing package).
- Learning **auth and fraud patterns** (rate limits, device fingerprints, step-up verification) and **zero-downtime migrations** from senior reviewers, and ships every login change behind a **feature flag** with a rollback plan.
- Works with **senior engineers**, the **fraud operations** and **compliance teams** and **mobile engineers** in New York and Menlo Park, joins **design reviews**, and carries the **Identity pager** with a senior backup.
- Owns the **runbook for SMS verification incidents**, helps **fraud analysts** write their own **SQL** against the login event tables, and gives a short **Kafka basics** talk to each new Identity hire.

TECHNICAL SKILLS

Languages:	Go, Python, SQL, JavaScript (bootcamp), TypeScript (basics)
Back-End Frameworks:	Go net/http, Django, Django REST Framework, Node.js and Express (bootcamp)
API Standards & Protocols:	gRPC, Protocol Buffers, REST, OpenAPI, JSON Schema
Databases & Data Stores:	PostgreSQL, Redis, Snowflake, schema migrations
Messaging & Streaming:	Apache Kafka (consumers, dead-letter topics), Celery (basics)
Cloud & Infrastructure:	AWS (EC2, S3), Docker, Kubernetes, GitHub Actions, Linux
Testing & Observability:	pytest, Go testing package, Testcontainers, Prometheus, Grafana

EDUCATION

Hack Reactor — Software Engineering Immersive (12 weeks) — Remote · May 2024 to Jul 2024

New York University, Stern School of Business — B.S. in Business, Finance concentration — New York, NY · Sep 2016 to May 2020

WORK EXPERIENCE

Robinhood — Software Engineer, Backend — New York, NY · Oct 2024 to Present

- Built the trusted devices **gRPC** service in **Go** behind the app's Security screen, with a **Protocol Buffers** contract, cursor pagination and remote sign-out, used by **1.3M customers** in its first quarter.
- Added per-number and per-IP rate limits in **Redis** to SMS verification codes, stopping an **SMS pumping** attack from overseas numbers and cutting monthly verification texting costs by **37%**.
- Wrote a **Python Kafka** consumer that feeds login and device-change events to the fraud rules engine, with idempotency keys and a dead-letter topic, handling **4.6M events** a day.
- Moved device fingerprints out of the **PostgreSQL** sessions table with a zero-downtime migration and a concurrently built index, cutting p95 login lookup time from 140 ms to **23 ms**.
- Joined Identity on-call with a senior backup and added **Prometheus** alerts on code delivery failures per SMS provider, cutting time to detect a provider outage from 2 hours to **9 minutes**.

Equinox — Financial Analyst — New York, NY · Jun 2020 to Apr 2024

- Modeled the membership lifecycle (join, freeze, upgrade, cancel) as one **Snowflake** table of status changes, closing a monthly gap of **2,300 members** between the finance and club reports.
- Rewrote the month-end revenue **SQL** with pre-aggregated tables and clustering keys, cutting the full close run from 3 hours to **18 minutes** and freeing the team for variance analysis.
- Wrote **Python** checks with **pytest** that reconcile billing exports against the general ledger before each close, catching **14 billing errors** before they reached the CFO's monthly review.