

# David Barsky

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## Work Experience

Fall 2017–Present

### Amazon, Alexa AI

#### Software Engineer

- Integrated test data generation system into unified first/third party natural language model building/testing platform, removing distinction between and first and third-party skill development.
- Sped up test data validation tooling used by customers 22x, reducing runtime from 45 minutes to 2 minutes.
- Maintaining Rust-specific integration to Amazon-internal build/deployment systems.
- Launched the AWS Lambda Runtime for Rust.
- Designed and implemented a test data generation service used across Alexa. This new system is horizontally scalable and is 7x faster over the prior system.
- Implemented Alexa's natural language model to be hardware-capability aware. This significantly reduced engineering effort needed to support new devices and cut the public Alexa service's memory usage by 30%.

Summer 2016

### Amazon, AWS Payments

#### Software Engineer (Intern)

- Worked in Payments organization in Amazon Web Services.
- Architected and developed a distributed, fault-tolerant service for financial data auditing that simplified payments infrastructure and reduced on-call burden.

## Education

Fall 2013—2017

### Brandeis University

Computer Science, B.A. with Honors.

Completed additional coursework in History and Politics

## Selected Projects

### Rust Runtime for AWS Lambda ([github.com/awslabs/aws-lambda-rust-runtime](https://github.com/awslabs/aws-lambda-rust-runtime))

- Launched and maintaining the Rust Runtime for AWS Lambda.

### Tokio ([github.com/tokio-rs/tokio](https://github.com/tokio-rs/tokio))

- Co-maintainer of Tokio, Rust's asynchronous runtime.
- Helped launch Tracing, a unified, high-performance instrumentation system for Rust that emits logs, metrics, and traces.

### Honor's Thesis ([github.com/davidbarsky/sirens](https://github.com/davidbarsky/sirens))

- Benchmarked job scheduling algorithms across various simulated workloads.

## Skills

**Languages:** Rust, Go, Python, Swift, Java

**Tooling:** AWS (DynamoDB, ECS, Lambda), Unix-like systems, Docker, Git, gRPC