

# ALEX SHADLEY

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## EDUCATION

University of Kansas  
2016 – 2020

### COMPUTER SCIENCE B.S.

- Honors Student, National Merit Scholar, **GPA 3.86/4.0**. Graduate level coursework in graph theory, data science, and algorithms.

## EMPLOYMENT

### [rideOS](#)

San Francisco, CA  
Summer 2020 - Present

### SOFTWARE ENGINEER II - January 2021

### SOFTWARE ENGINEER - June 2020

- Designed, implemented, and productionized algorithms to optimize vehicle routing, enabling a **10x speedup** for problems involving hundreds of vehicles and tasks spanning multiple days.
- Built data pipelines to efficiently process vehicle position updates, providing realtime ETAs used to notify customers when packages are close to being delivered. (**Apache BEAM, Google Dataflow, Google BigTable**)
- Primary contributor for Dispatch API, a key customer-facing product. Architected breaking API changes without disrupting existing customer integrations. (**Java, gRPC, Protobuf, Kubernetes, Google Spanner**)
- Helped prototype faster and more memory-efficient routing engine rewrite (**Rust**).

### [Applican](#)

Summer 2019 - Spring 2020

### COFOUNDER

- College startup with four classmates. Sought to make the CS internship application process more efficient and insightful for companies and applicants.
- Earned seed grant from 1517 fund, partnered with 10 local companies. ~\$10K in external funding / grants earned.
- Led effort to build a full stack app, including AWS deployment. (**Python, Flask, PostgreSQL, Docker**)

### [RiskIQ](#)

Summer 2019

### SOFTWARE ENGINEERING INTERN

- Built Slack integrations for customers (**Python, Flask**), incorporated feedback from end users and deployed to AWS.

University of Kansas  
Spring 2019 - Winter 2019

### UNDERGRADUATE RESEARCHER

- Collaborated with a small team of undergraduates to build an [in-browser interpreter](#) for a functional programming language with Hindley-Milner type inference (**Elm**).
- Designed tools to draw type trees of code, with applications in explaining functional programming concepts and improving productivity by explaining errors in programs

## INVOLVEMENT

- Developed [SmartPants](#) at Make Harvard 2020, the only pants that protect your wallet from getting lost!
- Built [Spruce](#), a compiled language with pattern matching, static type inference, and algebraic data types.
- [Participated](#) in MIT's Battlecode 2021 contest, where competitors attempt to design the best-performing AIs in a simulated game.
- Presented beginner's workshop at the ACM chapter at the University of Kansas, teaching CS students how to build websites using Python and Flask