

# John Calvin Roberts

Senior Software Engineer  
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## Work Experiences

10/2024 - (now)	<b>Mirage (fka Captions)</b> - Senior Software Engineer <ul style="list-style-type: none"><li>Full-stack product engineering with <b>Typescript</b>, <b>Python</b>, and lots of <b>Large Language Models</b></li></ul>
04/2023 - 10/2024	<b>AlpacaML (acquired by Mirage in 2024)</b> - Senior Software Engineer <ul style="list-style-type: none"><li>Full-stack startup development using <b>Typescript</b>, <b>React</b>, <b>Node JS</b>, and <b>Python</b></li><li>Lead developer for Alpaca's Editor, built using advanced graphics tech such as <b>Three.js</b>, <b>Fabric</b>, and <b>shaders</b></li><li>Built subscriptions and billing infrastructure, taking Alpaca from zero revenue to positive cash flow</li><li>Mentored junior teammates on topics such as <b>Kubernetes</b>, <b>Postgres</b>, and <b>Typescript</b></li></ul>
08/2022 - 04/2023	<b>Uplight</b> - Senior Software Engineer <ul style="list-style-type: none"><li>Full-stack developer on the billing team, using <b>Python</b>, <b>Typescript</b> and <b>React Native</b>.</li><li>Leveraged knowledge of <b>Kubernetes</b> and <b>Google Cloud Platform</b> to decrease cloud costs for a major production <b>Django</b> application.</li><li>Created a <b>gRPC</b> layer on top of an existing back-end service managing over 200k smart home devices during company-wide hackathon.</li></ul>
10/2021 - 08/2022	<b>Italic</b> - Software Engineer <ul style="list-style-type: none"><li>Lead back-end developer on a team of 6 on the marketplace team, in charge of refactoring a critical hot path to use event-driven architecture with <b>Go</b>, <b>AWS Lambda</b> and <b>SQS</b>, processing more than 20k orders in a day. Our refactor greatly reduced order creation errors and improved data integrity.</li><li>In first 3 months, worked closely with product &amp; design on an overhaul of the front-end Checkout experience using <b>React</b>, <b>Next.js</b>, <b>Tailwind</b>, and <b>Apollo GraphQL</b>, resulting in high praise from company leadership.</li><li>Went above and beyond the role of software engineer -- solved a long-standing authentication bug by designing a pattern for better read consistency from <b>Postgres</b>, reducing login failure by 20%; used load testing and profiling tools such as <b>k6</b> to scale high-traffic pages to 10k req/second.</li></ul>
10/2018 - 10/2021	<b>Wiredcraft</b> - Full Stack Developer <ul style="list-style-type: none"><li>Built a custom localized-for-China ecommerce middleware system utilizing <b>Bull Queue</b> and <b>Redis</b> to process over 100k orders per day for a major retailer.</li><li>Served as code owner for a handful of multi-tenant microservices using <b>Node JS</b>, <b>Nest</b>, <b>Typescript</b>, and <b>Couchbase</b>.</li><li>Designed a monorepo-driven strategy for rapid development of <b>React</b> dashboards for client projects, greatly reducing the amount of front-end developer capacity needed per client project.</li><li>Mentored junior front-end developers, fostered a culture of positive and constructive code review among peers.</li></ul>
04/2017 - 10/2018	<b>Heyshop</b> - Full Stack Developer
04/2018 - 01/2020	<b>Le Wagon</b> - Bootcamp Instructor (part-time)
02/2016 - 02/2017	<b>FuguMobile</b> - Project Manager

## Education

02/2017 - 04/2017	<b>Le Wagon</b> - <i>Shanghai, China</i> Full Stack Development
08/2013 - 12/2015	<b>Donghua University</b> - <i>Shanghai, China</i> Master of Economics, International Trade
06/2010 - 08/2010	<b>Middlebury College</b> - <i>Middlebury, Vermont, USA</i> Chinese Language
09/2008 - 06/2012	<b>Lewis &amp; Clark College</b> - <i>Portland, Oregon, USA</i> Bachelor of Arts and Sciences, East Asian Studies

## Personal Projects

- pprmnt.** - An MP3 encoder made with **WebAssembly**
- cr yp** - Easy-to-use file encryption tool built on **Svelte**
- Craglog** - A training tool for rock climbers to track their fitness. **React** front end + **Nest** JS back end.
- guu** - A small browser logging tool. Better than debug.
- SSSRPBP** - Super Simple Stupid **React** Prototyping Boilerplate

## Spoken Languages

- English - *Native*
- Mandarin Chinese - *Advanced (HSK 6)*
- Spanish - *Elementary*

## Interests

Electronic music production, rock climbing & bouldering, trail running, bonsai cultivation 🌲