

MARK ALPERIN

Full-Stack Engineer | Veteran | Austin, TX | (562) 253-5106 | mark.t.alperin@gmail.com
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TECHNICAL SKILLS

Front End | JavaScript (ES5/ES6), Typescript, React, React-Native, Redux, HTML5, CSS3, Babel, Webpack
Back End | Node.js, Express, Python, PostgreSQL, MySQL, MongoDB, Socket.io, RESTful API Development
Testing/Deployment | AWS: EC2, Firebase, Heroku, Nginx, Loader.io, Artillery.io, Mocha, Chai, Jest, Git

SOFTWARE ENGINEERING APPLICATIONS

Software Engineer | Secret Card Club | *React-Native, Node.js, uWebSockets, PostgreSQL, Express.*

Mobile playing card sandbox game for up to 8 players.

- Implemented custom card deck and table sandbox UX with the **React-Native** PanResponder and Gesture Responder systems to intuitively simulate real life interactions.
- Used the React-Native Animated library to synchronously display player actions to all users.
- Leveraged **uWebSockets** to create a real-time data stream between the server and the clients.

Front End Engineer | Project Greene | *React, Firebase, Socket.io, GoogleMaps*

Interactive donation website to connect and broker exchanges between local users.

- Created embedded map components via the **GoogleMaps API** to provide UI/UX for local-to-user data.
- Built out **React** functionality for the landing, browse, and item pages for an intuitive user experience.
- Implemented **Socket.io** to create a real-time video chat client to enable user to user communication.

Back End Engineer | Ratings-Reviews-API | *Node.js, Express, Nginx, MongoDB, AWS, Artillery.io, Loader.io*

Backend system designed to handle production level traffic for 15 million data entries.

- Aggregated 15 million documents to a **MongoDB** database and optimized to reach API query response times of 14ms.
 - Horizontally scaled with **NGINX** and 3 **AWS EC2** instances to increase server capacity to 10,000 requests/second with an average of 14 ms response time and a < 1% error rate.
 - Utilized **Artillery.io** and **Loader.io** testing to track changes in server performance following incremental adjustments through all phases of development.
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EXPERIENCE

Industrial Electrician | Marine Firemen's Union 2013-2021

- Investigated and repaired 100+ industrial electrical failures, with logic-based troubleshooting.
- Executed dozens of emergency repairs that allowed the ship to depart on schedule, saving many tens of thousands of dollars.

Infantry Squad Leader | 3/75th Ranger Regiment, US Army 2001-2006

- Thrived in a high-stress environment with a demanding schedule and dynamic goals, evidenced by 5 special-operations deployments to Afghanistan and Iraq.
 - Planned and executed a program of technical and tactical training for a 9-man squad.
 - Mentored 5 junior soldiers to complete ranger school and 2 team leaders through NCO promotions.
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EDUCATION

Hack Reactor | Certificate, Advanced Full-Stack Software Engineering 2022

Seattle Maritime Academy | Certificate, Marine Engineering Technology 2013

University of California Santa Cruz | B.A. Community Studies: Economic Justice 2011

AWARDS

Significant military decorations: **Bronze Star Medal** with 'Valor' device, **Soldier's Medal**, **Army Commendation Medal x2**, Army Achievement Medal, Ranger Tab.

INTERESTS

Board games, long-distance backpacking, recreational sailing.