

# John Alexander Ferguson

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Full-Stack web developer.

Always learning, never stagnant.

## UNIVERSITY OF CALIFORNIA, BERKELEY

Date Completed

Bachelor of Science, Nutritional Science: Dietetics

May 2017

Berkeley Coding Boot Camp (3 Month: 60+ hrs/wk)

January 2018

## PRIMARY CODING TECHNOLOGIES & TOOLS

- \* JavaScript: Node, React/Redux/React Native/Next.js, Webpack, Babel, Express, Electron, SQL-[Knex/Sequelize](#), [Mongoose](#), jQuery
- \* HTML/CSS: ARIA standards, BEM, CSS Modules, CSS Grid & Flexbox, SVG animations, Bootstrap, cross-platform knowledge
- \* Others: GraphQL, Apollo, REST, XML, SQL (MySQL & TSQL dialects), UI/UX patterns, WebAssembly, CS Fundamentals

## PROJECTS

### Project Eagle: Investment and automobile form for Redwood Credit Union staff

- Full-Stack React/Node app, mobile responsive, IE11 supported, no Bootstrap
- Created during Agile sprints, daily huddles with tellers, backend-staff, and boss to discuss app progress
- Adhered to the Atomic Design principle of file structure and component use

### Party Change: Update info of many members across multiple accounts

- Large Form that pre-loaded member info from a party (a collection of accounts)
- Full-Stack CRUD React/Node/Express app, connected to XML database, mobile responsive, IE11 supported
- Used SmartyStreets REST API to verify both domestic and international addresses
- Coded logic to decide when to POST and/or PUT data across multiple accounts when form was saved
- Real-time error checking for incorrect dates, wrong data types, and necessary fields

### Brewski: Identify and review your favorite craft beers

[GitHub Repo](#) | [Deployed Link](#)

- Developed MERN app where beers can be identified by Google Vision via Text and Logo Detection
- Updated in real time as users got beer reviews and other metrics via React with RateBeer and BreweryDB APIs
- Enabled Google OAuth2 for authentication and established schema design
- Coded seeds, migrations, and relations between models with Sequelize; database held user reviews and API data
- Became proficient in GraphQL and its use in Apollo.js

### Migrení: A migraine diary for those who seek simplicity

[GitHub Repo](#) | [Deployed Link](#)

- Developed website to log and store migraines in MySQL and view them later with dynamically created graphs
- Created models, GET/POST requests with Sequelize, and AJAX calls within Node.js and Express middleware
- Implemented user authentication with internal login and Chart.js to graph user's migraine intensity
- Created complex many to many relations in schema to store users migraine and drug information
- Used previous biostatistics and research knowledge to data normalize MySQL database
- Dynamically showed user's migraines and associated data through Handlebars.js templating engine

## WORK EXPERIENCE

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### REDWOOD CREDIT UNION: Programmer I

Santa Rosa, CA: April 2018 – Current

- Convert .NET w/bootstrap apps to FullStack Node/React apps w/pure css to utilize NPM's tools for many projects
- Ensure apps are tablet & mobile responsive and cross platform (IE11, Chrome, Firefox, Edge) without bootstrap
- Create CRUD REST APIs in Node from MSSQL databases on top of XML APIs
- Had to learn languages out of my comfort zone (C#, SQL, XML's XSD schema, PowerOn)
- Constantly providing opinion on state of JS and React, up to date on popular repos for React/Redux, illustrated benefits and cons of Node
- Frequent meetings with front-line staff to wireframe websites for their use, utilized many proven UI/UX principles, updated co-workers with JIRA Tickets, collaborated with team through BitBucket
- Work with consultants to build One Member View (an app that provides a snapshot of member info for any employee), conduct code reviews of their work
- Attend many community projects

### UC BERKELEY: Teaching Assistant

Berkeley, CA: January 2018 – April 2018

- Educate 30+ student full-stack JavaScript full-time web development boot camp
- Assist students, grade assignments, and hold study sessions while studying data structures and algorithms
- Check master repos for errors on GitHub and GitLab, commit bug fixes and new material when necessary

### EATSA: Food Science Intern

San Francisco, CA: September 2016 – June 2017

- Tested and analyzed Java code for efficiency with data manipulation
- Worked with food science team to chemically evaluate food bowls and analyzed data using algorithms
- Used VLOOKUP function as well as other Excel built in macros to create algorithms

### NUTRITION POLICY INSTITUTE: Survey & Data Intern

Berkeley, CA: March 2016 – September 2016

- Surveyed Bay Area residents about soda preferences, usual consumption, and opinion about soda tax
- Analyzed survey data to illustrate soda tax effectiveness in Berkeley and transcribed audio from interviews

## VOLUNTEER/TEACHING EXPERIENCE

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### KAISER PERMANENTE: Research Intern

San Rafael, CA: May 2015 – Jan 2016

- Researched Tenofovir induced Fanconi Syndrome in HIV, Hep B, and pre-exposure prophylaxis patients in large cohort study within northern California
- Analyzed studies using Excel macros to formulate research focus
- Contributed to IRB application's background and rationale
- Shadowed PI during ICU rounds and patient meetings, gained general hospital knowledge

## SKILLS & INTERESTS

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Nutrition | Peer-Reviewed Articles | Boxing | Swimming | Public Speaking | CPR & First Aid | Soldering