

## Skills

JavaScript, Ajax, Promises/A+, jQuery, Node, Express, REST, RDBMS, MongoDB, Backbone, Angular  
TDD, Build Tools, Team Git, Socket.io, API Integration, OAuth, D3, Bash, Docker, Python, Web Scraping

## Recent Projects

**FerdX** — Product Lead, Full-Stack Engineer — [ferdx.io](http://ferdx.io)

*One-click integration for extensible Slack bots*

- Engineered modular bot logic powered by Node to offer beautifully structured information in Slack channels
- Applied functional & reactive patterns using RxJS to process intermittent streams of asynchronous web events
- Leveraged npm's ecosystem to cultivate a developer community for sharing and expanding bot capabilities
- Launched dashboard interface built on Angular enabling Slack users to easily customize extension modules

**Slideshow** — Product Designer, Full-Stack Engineer — [de.sayberlin.com](http://de.sayberlin.com)

*Vocabulary learning app with audio*

- Architected single-page app with Backbone following clean engineering patterns for structuring UI components
- Furnished backend API using Express and SQLite data store, with audio resources loaded from asset servers

**Foxy** — Architect, Backend Engineer

*Real-time, multi-player arcade game operated via mobile devices*

- Prototyped a gaming platform with Node and Socket.io, allowing real-time interaction between mobile devices

**Typist** — Product Designer, Full-Stack Engineer — [typist.firebaseio.com](http://typist.firebaseio.com)

*Typing game with audio*

- Utilized jQuery and SoundManager to create an engaging user experience with interactive audio-visual effects

**Finn** — Full-Stack Engineer — [fi.sayberlin.com](http://fi.sayberlin.com)

*Finnish-English dictionary with instant search*

- Sourced and re-structured lexical data using Python libraries and abstracted the MongoDB layer as a service
- Implemented fast, responsive interface with Angular and Express to display instant results as the user types

## Experience

- 2013-2015     **Child Language Lab, Macquarie University** — Leading research center in linguistics  
Worked on research analyzing speech data with the set of technologies that powers Apple's Siri  
Gained extensive insight on research design and projects with a strong focus on data analysis
- 2012-2013     **Motvind, Inc., A Delaware Corporation** — A self-funded startup in the online learning space  
Led remote engineering team using Agile tools and developed products for web-based learning  
Acquired in-depth knowledge of product design, customer development, and Lean practices
- 2010-2012     **Southern Water, Tasmania** — Regulated utility, 800+ employees, \$2 billion in assets  
Conducted engineering review of building & planning proposals in relation to water supply  
Helped improve revenue by fast-tracking infrastructure pricing calculations for utility assets

## Education

- 2015     **Hack Reactor, San Francisco** — Advanced Software Engineering Workshops
- 2012-2015     **Macquarie University, Sydney, Australia** — Bachelor of Science (Speech and Hearing)
- 2013-2014     **University of Jyväskylä, Central Finland** — Exchange Program, Erasmus Student Network
- 2008-2009     **Tasmanian Polytechnic, Hobart, Australia** — Advanced Diploma of Engineering Design

## Personal Interests

Linguistics, Teleportation (*fig.*), Neurogenesis, Cognition, VR, AI, Futurology, Livability, Architecture, Design, Puppies