

Joshua Essex

Software Architect

San Francisco, CA // Sydney, NSW | essexjosh@gmail.com

[in linkedin.com/in/joshuaessex](#) [@ jessex.ch](#)



Career Growth

Architect, Tech Lead, Principal Engineer

Jun '11 - present

Opower

Architect, Outbound organization, Jan '16 to present

- Set the technical vision for the Outbound Platform and downstream products, software that drives all of Opower's energy savings and the bulk of its revenue.
- Created comprehensive development guidelines covering all aspects of the engineering process for a new organization with a new charter and roadmap.
- Enabled an organization of **40 engineers** to implement an ambitious roadmap and fulfill commitments to major clients, including PG&E and BGE -- the **two biggest utilities** in the U.S.

Technical Lead, Content and Tools team, May 2016 to present

- Led the team that owns our dynamic content generation tooling, full stack.
- Led the rebuild of Opower's Tips architecture, systems for tracking, administering, and providing mission-critical tip content to all Opower products.

Co-founder, Opower Engineering Mentorship Program, Dec '14 to present

- Created a program to facilitate mentorship among more than **100 engineers**.
- Scaled the program to reach the entire organization in six months, with satisfaction ratings greater than **90%**.

Technical Lead, Outbound Platform team, Apr '14 to May '16

- Expanded the Outbound Platform, enabling the creation of **12 new products** and the modernization of Opower's flagship product, Home Energy Reports.
- Architected the **Communication History Service**, a system for capturing and serving event data emitted by our Outbound Platform. Records **billions of events** per month, forming a complete historical log of Opower's outbound operations.

Senior Software Engineer, Outbound Platform team, Sept '12 to Apr '14

- Core contributor to designing and implementing our **Outbound Platform**, which generates and delivers **millions of targeted communications** per week. The Outbound platform has outsized impact, saving the world **ten terawatt hours** of energy and more than **\$1,000,000,000** on energy bills.
- Launched a business-creating product: **Peak Time Rebates**, which drive energy savings greater than **5%** across millions of people during times of peak demand.

Education

B.S. Computer Science

Aug '07 - June '11

George Mason University

Cum Laude, Honors College, Distinguished Teaching Assistant, Dean's List

Summary

I'm Joshua, Opower's youngest architect. I design systems and lead teams. For six years, I've collaborated with brilliant people to save energy at a massive scale. I love being part of a mission-driven organization and working with close friends. I'm excited to find ways to scale my impact within an organization, and to solve big problems in the real world.

Skills and Tools

Leadership: Mentorship, exceptional written and verbal communication, team leadership, cross-team and remote collaboration, adaptation and flexibility, rapid iteration

Technical: Architecture and design, backend engineering, distributed systems, batch and stream processing, api design, test driven development, operations, continuous delivery, frontend engineering

Tools: Modern Java, Apache Kafka, Apache ZooKeeper, AWS, RabbitMQ, MySQL, Redis, OpenTSDB, Sensu, Splunk, Dropwizard, Spring, Spring Batch, Python, Ruby, Rails, Angular

Productivity despite wanderlust: Led a team based out of a different office for two years, led a team remotely for six months, worked with teams ten time zones away, have committed code in more than 20 countries, and kept teams moving forward while living in D.C, San Francisco, Seattle, Mexico, and Sydney