

## SUMMARY

I am a full stack and distributed systems engineer with a passion for cloud computing. I have expertise in designing, implementing, and scaling distributed architectures end-to-end. I also have multiple years of experience with full stack applications and backend database development with a proficiency in Node.js and Ruby on Rails.

## EXPERIENCE

### Conclave (<https://bit.ly/conclave-site>)

**Co-Creator**

**New York, NY**

**October 2017—Present**

- Co-created and deployed an open source, real-time, P2P, collaborative editor.
- Built a custom conflict-free replicated data type (CRDT) to increase throughput by over 1000%.
- Created a P2P architecture using WebRTC to reduce network latency up to 3000%.
- Utilized a distributed system and the gossip protocol to reduce scaling costs by 100%.
- Implemented a load-balancing algorithm to scale the application to dozens of concurrent users.
- Built a version vector to guarantee causality and merge non-commutative operations.
- Wrote a detailed case study that was published in a popular technology publication and garnered over 2,000 views.

### Freelance Full Stack Engineer

**Full Stack Engineer**

**New York, NY**

**January 2016—August 2017**

- Worked with design teams to create static and dynamic websites for clients using various technologies that increased web traffic by up to 100%.
- Improved my programming skills through self-motivated full stack web applications and open source contributions.

## RECENT PROJECTS

### Mello

[github.com/sunny-b/mello](https://github.com/sunny-b/mello)

- List application that allows user to create, delete, label, search, and reorganize lists and cards.
- **Live Demo:** <https://trello-clone-sjb.herokuapp.com>
- **Stack:** Express, Node.js, Backbone.js Handlebars, Jade
- **Rebuild using Rails/React:** <https://github.com/sunny-b/reaction>

### OpeningAct (featured in Ruby Weekly)

[github.com/sunny-b/opening\\_act](https://github.com/sunny-b/opening_act) ~3500 downloads from [rubygems.org](https://rubygems.org)

- A ruby gem that creates a Sinatra scaffold in a single shell command.
- **Stack:** Ruby, Sinatra

## EXTRACURRICULAR

### Technical Blog Writer

**December 2016 - Present**

Currently wrote 16 articles about various software engineering topics with ~4500 views.

## SKILLS & LANGUAGES

**Back End:** Ruby, Ruby on Rails, Node.js, Express, RESTful APIs

**Front End:** JavaScript, React, Redux, Backbone.js

**Other:** WebRTC, PostgreSQL, Distributed Systems

## EDUCATION

### University of Washington

**Seattle, WA. September 2009-December 2012.**

B.S. in Oceanography. GPA: 3.8 – Cum Laude.