

# Danish Rehman

San Francisco, CA, USA  
drehmanc@gmail.com

<http://d-rehman.com>  
<https://github.com/dan-boa>

## Education

- **University Of Southern California - Los Angeles, CA** Summer 2015
  - *Candidate of Masters of Science, Computer Science*
    - Operating Systems, Computer Networks, Internetworking and Distributed Systems Laboratory

## Skills

**Technologies:** Python, C, React, Redux, Nodejs, Flask, Cassandra, MySQL, RabbitMQ

## Relevant Experience

- **Cision - Social media analytics team** San Francisco, US  
*Senior software engineer* 2016 – 2017
  - **Atlas: Data rollup storage platform:** (Nodejs, RabbitMQ, Cassandra, Docker, Docker-compose) Designed and developed Atlas. Atlas is a high-throughput data rollup storage platform for CISION. It is suited to store time-based data (even time-series) and exposes a HTTP REST API to make it suitable in any language. Data is fed into the queue which is in turn read by the workers and rolled up subsequently and saved into the Cassandra.
  - **Frontend:** (React) Worked in building graphs from the data received from analytics rollup system.
- **Brightroll - Video Ad exchange** San Francisco, US  
*Adserv Engineer - User mapping system* 2015 – 2016
  - **Bulk user mapping post:** (C, Libevent, Urcu - linux lockfree datastructure) Created an in-memory lock-free data-structure to bulk post on data-store. Reduced the load on data store by 500%.
  - **Cookie matching pixel server:** (C, Libevent, Ruby) Wrote from scratch a cookie matching server. Handling 60K QPS traffic.
  - **Rate limiting module:** (C, Libevent) A plug and play rate limiting module using token bucket algorithm. Able to rate-limit per partner per thread. Currently rate-limiting at 10K QPS.
- **Imageboard - similar to 4chan** San Francisco, US  
*Owner/Moderator* 2016 – 2017
  - **Imageboard:** (Python, React, Flux, Redux, MySQL, Flask, Nginx, S3) I am running it as a side project since January 2016. Currently it receives 1.6 Million page views per month. I wrote it from scratch including the moderation tool. Currently working on moving from Flux to Redux.
- **Goibibo - Startup Travel website** Bangalore, India  
*Optimization Engineer* 2010 – 2013
  - **Memcached adaptive expiry algorithm :**(Python, Memcached, MySQL) Implemented an algorithm to derive expiry time of cached data. Have filed patent for it. It increased the hit rate from 28% to 58%.
  - **MongoDb based critical logs monitoring :**(Python, MongoDB, MySQL) Built to broadcast realtime alerts which resolved 80% critical logs within the first hour.
  - **Recommendation engine using Redis :**(Python, Redis) Sorted set of redis was used for international search result. Increased the sale of international flights by 8%.
  - **Log Dumping and Historical-Realtime analytics architecture :**(Hadoop, MongoDB, Python) Map reduce jobs over MongoDB. Creating architecture for filling MongoDB collection and summarising them using map reduce and storing in MySQL.
  - **Scheduling system:** (Pybloomfilter, Django) Implemented to reduce api calls to external vendor. Decreased the external api calls by 50%.