

Spencer Chang

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EDUCATION

Rice University, Houston, TX

August 2015 – May 2019

Master's: Computer Science | **Bachelor's:** Computer Science | **Minor:** Business

GPA: 3.87

Relevant Coursework: Deep Learning, Data Science, Web Dev, Artificial Intelligence, Parallel Computing, Statistical Machine Learning, Database System Implementation, Operating Systems

SKILLS

Languages: Python, Java, Ruby, C, JavaScript, C++, HTML, SQL, Scala

Software & Frameworks: Git, Rails, Jupyter, React, Node, MongoDB, Angular, Express, Spark, TensorFlow, Keras

EXPERIENCE

Airbnb | *Software Engineering Intern on Trips Platform* | San Francisco, CA

May – August 2018

- Extended knowledge graph infrastructure to associate locations (markets/neighborhoods) with Airbnb inventory (homes, points of interest, experiences, etc.) to enable easy traversal of inventory by location and surface insights about what make locations unique by training word embeddings on the relationships and entities
- Designed and drove product for multiple use cases powered by this infrastructure and data, including neighborhood sections in email, neighborhood search groupings in SEO pages, and existing edge inference model
- Authored blog post on scaling information access at Airbnb

Kleiner Perkins | *Kleiner Perkins Engineering Fellow* | San Francisco, CA

May – August 2018

Square | *Software Engineering Intern on Capital* | San Francisco, CA

May – August 2017

- Created and designed full stack application using EmberJS and Ruby on Rails to provide a general solution for partners to upload their customer data and offer their merchants loans without any engineering work
- Designed RESTful endpoints and used protobufs to ingest the data and implemented scheduled jobs with Sidekiq
- Upgraded Sidekiq to the latest version (5x throughput) for the Capital-wide repo and deployed to production

PROJECTS

Nuclei Detection | *Kaggle Data Science Bowl 2018* | [spencerc99/data-science-bowl-2018](https://github.com/spencerc99/data-science-bowl-2018)

January – May 2018

- Implemented Mask R-CNN and U-Net to automatically detect nuclei in medical images to improve cancer detection
- Created end-to-end pipeline and infrastructure for training and evaluating multiple models and datasets

Chorus | *HackMIT (Top 10 overall)* | [lzhang124/chorus](https://github.com/lzhang124/chorus)

September 2017

- Collaborative way for strangers to create music together and share perspectives and styles
- Worked on backend database, the music-playing functionality, and the map to track contributions
- Full stack application using Flask, MongoDB, and d3.js

Crisis Management Team (Hurricane Harvey Analysis) | *Rice University*

August 2017

- Analyzed data on the Rice community's needs immediately post Hurricane Harvey and identified actions for the Provost and the administration to alleviate pressure on staff, faculty, and students, using Python and pandas

LEADERSHIP + ACTIVITIES

Rice CS Club (Rice ACM) | *President (2017-Present), External Vice President (2016-2017)*

March 2016 – Present

- Lead vision for creating a closer CS community and launch new initiatives, including new technology and career workshops and mentorship events for underclassmen, increasing attendance of events by 30% on average
- Managed communications with outside organizations and coordinated events for them to connect students with technology opportunities (including leading sponsorship advertisement for HackRice raising over \$50,000)

Algorithmic Thinking & Artificial Intelligence | *Teaching Assistant*

January 2017 – Present

- Mentor students at office hours and labs and help with class infrastructure for classes of over 200 and 100 students

Rice Entrepreneurship Club | *Founding Team & Executive Board Member*

December 2015 – May 2017