# Jonathan Cai

### Education

Aug 2017 – Aug 2021 Rice University, Houston, TX Bachelor of Science in Computer Science, GPA: 3.88/4.00, Major: 3.90/4.00 President's Honor Roll: Fall 2018, Fall 2019, Spring 2020

# Industry Experience

- May 2020 Aug 2020 Facebook, Software Engineering Intern, Menlo Park, CA. Improved network config generation service which handles ~40k requests a day (Python). Achieved 10% decrease in service response time by building an in-memory cache. Prevented several site events by extending regression and A/B testing framework.
- Jun 2019 Aug 2019 **JPMorgan Chase**, *Software Engineering Intern*, Houston, TX. Developed full-stack web app for bankers to visualize loan/bond data (Java, React). Built data pipeline for asynchronous data retrieval at scale, ~12k datapoints hourly.
- Jun 2018 Aug 2018 **Sihua Technologies**, *Software Engineering Intern*, Cupertino, CA. Achieved 70% decrease in deployment time by reengineering CI/CD pipeline (Go). Built primary notification system for end clients through Gmail and Slack.

### **Other Experience**

- Feb 2020 Current **RiceApps**, *Co-President*, Houston, TX. Leading app development club of 40 students building for thousands of users.
- Aug 2018 Feb 2020 **RiceApps**, *Team Lead*, Houston, TX. Led team of 7 students to build custom blog and website for a local non-profit (React). Built mobile food delivery system (React Native, Apollo GraphQL, MongoDB).
- Aug 2019 May 2020 **Rice University**, *Head Undergraduate Teaching Assistant*, Houston, TX. COMP 322 Principles of Parallel Programming (Java). COMP 330 Data Science Tools & Models (SQL, AWS, Spark, MapReduce, Tensorflow).
- Sep 2019 Dec 2019 **Rice University**, *Undergraduate Researcher*, Houston, TX. Built visualizations for neural networks as composed by max affine spline operators (JavaScript).

# **Projects**

Jun 2020 – Current	<b>My Desk Tour</b> , <i>mydesktour.com</i> . Platform for sharing desk setups (React, Apollo GraphQL, MongoDB, GCP). ~10k visits after beta launch, ~50 registered users, ~15 pieces of user generated content.
May 2020 – May 2020	What Time Today?, <i>whattime.today</i> . Tool that helps you quickly summarize your calendar availability (React, Google APIs). ~8k visits after launch, ~75 Google Calendar users, ~100 users per month.
Sep 2019 – Sep 2019	<b>DynaML</b> , 4th place at HackRice 9, 1st place Facebook Algorithmic Complexity. Machine learning research toolkit for graph neural networks (PyTorch, Flask, JavaScript).
Jun 2019 – Aug 2019	<b>News Sentiment</b> , <i>github</i> . Experimented 6 sentiment analysis methods on news, measuring stock price correlation. Involved use of Python, New York Times API, NLTK Library, Tensorflow.
May 2019 – May 2019	<b>Rackr</b> , <i>1st place at Capital One Hackathon.</i> Receipt scanning iOS app with personal finance metrics (Swift, Flask, Python).
May 2018 – May 2018	Nows Visualization 3rd place at ATP. T Hackathan
May 2010 - May 2010	<b>News Visualization</b> , <i>3rd place at AT&amp;T Hackathon</i> . Graph relationships between political figures through news articles (Python, JavaScript).

All other projects at *jonathancai.com/projects*