Jianchao (Jesse) Yang

hello@yjc.me · ▯ (857) 302-8393 · ⬛ ktmud

Experienced Front End / Data Science Engineer obsessed with
crafting powerful, sensible, user-centric data products

EXPERIENCE

Data Scientist II – **Zillow Group**, Seattle, WA   Mar 2019 - Present
- **Data Visualization** built a consolidated data mart for all major metrics of the New Construction business, designed and developed a comprehensive Baseline Performance dashboard; administered a pilot trial for Redash and Superset.
- **Causal Inference** developed an end-to-end multilabel image classifier with 96% accuracy; conducted causal analysis on the relationship between image/listing quality and search CTR, identified key areas for improvement.
- **Search Ranking** implemented, analyzed and A/B tested different data imputation strategies to address biases in home recommendation algorithms, boosted discoverability of new construction homes by 12%.
- **3rd-party Data Ingestion** wrote Java-based Hive UDFs and Airflow jobs to ingest terabytes of Google Ad Manager data every day, engineered foundational aggregation tables, assembled accompanying diagnostic and monitoring dashboards.

Data Scientist Intern – **Zillow Group**, Seattle, WA   May 2018 - Aug 2018
- Redesigned both the backend and frontend of a client-facing data product. Migrated on-premise MS SQL/R scripts to Airflow DAGs running on Hive, Spark, AWS EMR and S3 Data Lake, reduced daily job runtime from 8 hours to 30 minutes.
- Collaborated with PMs to define KPIs for Rental Management Platform, designed and built a Tableau dashboard that incorporated 12 user and listing attributes from 5 different sources, as both filters and segmentation dimensions.

Quantitative Developer Co-op – **GMO LLC**, Boston, MA   Jan 2018 - Apr 2018
- Created reusable and flexible MATLAB modules for sophisticated financial data visualization
- Refactored code, consolidated ETL pipelines, streamlined job automation workflows for financial forecasting models, improved usability and stability of Asset Allocation portfolio management tools

Research Assistant – **Boston Area Research Initiative**, Northeastern University   Jan 2017 - Dec 2018
- Collected, processed, and conducted geographical and temporal analyses on census and government administrative datasets
- Created an interactive map with Vue.js and Leaftlet.js to facilitate data exploration
- Implemented and designed methods to evaluate a novel iterative school assignment algorithm for Boston Public Schools

Client Side Developer – **Booking.com B.V.** , Amsterdam, Netherlands   Sep 2014 - Aug 2016
- Executed 100+ A/B testing experiments aimed at optimizing booking conversions on both desktop and mobile web
- Led usability testing sessions, gathered and translated user comments into testable experiment ideas

Full Stack Software Engineer (Part-time) – **Curiosity China**, Beijing, China   Dec 2013 - May 2014
- Architected and developed a CRM system with PostgreSQL, Node.js, Backbone.js, and visualizations built on NVD3

Front End Engineer – **Douban Inc. (Sequoa-backed Startup)**, Beijing, China   Nov 2011 - Mar 2014

Front End Engineer – **Taobao.com, Alibaba Group**, Hangzhou, China   Jun 2010 - Oct 2011

EDUCATION

Northeastern University, Khoury College of Computer Sciences, Boston, MA   2016 - 2018
Master of Science in Data Science

Sichuan Agricultural University, Ya'an, China   2006 - 2010
Bachelor of Engineering in Wood Science and Engineering (Interior and Furniture Design)

SKILLS

Languages	JavaScript, HTML, CSS/Sass/Less, Node.js, Python, R, SQL, MySQL, MATLAB, PHP, JSON, XML, Bash, Java, C
Frameworks	React, Vue, Backbone, jQuery, GraphQL, Flask, SQLAlchemy, Next.js, Webpack, Gulp.js, Pandas, Scikit-learn, Tidyr
Tools	Linux, Git, Airflow, Docker, Hive, Spark, Presto, Redis, MongoDB, AWS EC2, AWS S3, AWS EMR, AWS SageMaker
Data Vis	D3.js, Leaftlet.js, Vega, Mapbox, Google Maps, Matplotlib, Ggplot, Plotly, NetworkX, Tableau, Mode, Vega, Sigma.js

OTHER ACHIEVEMENTS

Speaker, *PWA in Small Steps* – **PWA Dev Summit 2016**, Amsterdam, NL	Jun 2016
Translator, *Chaos Monkey* - translated the 500-page book from English to Chinese	2016 - 2018
Open Source Contributor - contributing to various open source projects, including Redash, doWhy, etc.	2010 - Present