

(Alex) Siqing Liu

US Citizen – alexliusiqing@gmail.com – [linkedin.com/in/alex-liu-siqing](https://www.linkedin.com/in/alex-liu-siqing) – alexliusiqing.com/hire-me

EDUCATION

Amherst College | *Bachelor of Arts in Computer Science and History* Amherst, MA | May 2019

- GPA: 3.8/4.0. Relevant Coursework: Data Structures and Algorithms I & II, Intermediate Statistics, Probability, Theoretical Statistics, Advanced Data Analysis, Computer Security, Game Theory, Mechanism Design

SKILLS

Languages: TypeScript / JavaScript, Python, SQL, R HTML5/CSS3, Java (previous experience)

Technologies: React, Gatsby, Apollo, GraphQL, Node.js, Express, PostgreSQL, Docker, Terraform, AWS (Lambda, SAM, CloudFormation, S3, SES, EC2, RDS, Cognito, Amplify), Alibaba Cloud (Time Series Database for InfluxDB), Git, jQuery

PROJECTS

Margins – margins.me

One place for your marginalia. Import Kindle notes using email, search/tag/edit/note/export. Inspired by readwise.io

For details, Github Links, and discussion of design tradeoffs, see alexliusiqing.com/portfolio/margins/overview

- Front End:* React SPA wrapped in Gatsby static site, deployed on Netlify. Amplify/Cognito for Identity-as-a-Service, 100% TypeScript, Apollo for client-side caching, GraphQL Codegen for type-safety, Ant Design and Emotion for UI.
- GraphQL API:* Infrastructure-as-Code with Terraform, provisioned VPC, EC2, RDS using security best practices. EC2 hosts Docker-ized Nginx and Express running PostGraphile (programmatically generated GraphQL API). RDS running PostgreSQL, data security implemented with RBAC and RLS. HTTPS-enabled, authentication using JWT.
- Serverless Microservice:* Used SES, S3, Lambda, Cognito to receive user emails, parse Kindle HTML attachment, and store notes. Continuous Deployment using SAM. Parse HTML with a server-side jQuery library, Cheerio.

Yelp Dataset Challenge – alexliusiqing.com/portfolio/yelp-challenge

- Predicted star ratings (multi-class classification) with R (tidyverse, rpart, randomForest), conducted sentiment analysis

Boston Investment Conference 2017 Student Investment Idea Competition – alexliusiqing.com/portfolio/finance/bic

- Pitched Cinemark Holdings (CNK), one of 8 semi-finalists (undergraduates and graduates), won \$3000 ticket

UChicago Midwest Trading Competition

- Won 3rd place in Portfolio Investing against 20+ college teams, used Python (scikit-learn, NumPy, Jupyter)

WORK EXPERIENCE

Siroo Technology, 自维度技术应用（深圳） | *Software Consultant* Shanghai, China | May – July 2020

- Designed and built an IoT analytics stack for viewership data from 50k+ Set Top Boxes. KPIs made available real-time on dashboard. Shrunk storage size to < 1% of original MySQL database. Details: alexliusiqing.com/portfolio/iot-analytics
- Built using Alibaba Cloud Function Compute, TSDB (Time-Series Database, InfluxDB), and Grafana.

Barclays | *Sales and Trading Analyst* New York, NY | June 2019 – January 2020

- Joined Single Stock Equity Derivatives in the healthcare team, covering bio-tech, med-tech, pharma, distributors, etc.
- Researched and developed financial modelling app, built with R (Shiny) and Bloomberg's API, to predict equity price distributions after bimodal events from options chain. Used to identify and verify mispriced options.
- Analyze catalysts – clinical trial statistics, FDA actions, litigation, conferences. Pitched trades that generated 100k+ in PnL

Barclays | *Sales and Trading Summer Analyst* New York, NY | June 2018 – August 2018

- High Yield Trading, Macro Structuring, and eFX Trading. Analyzed client sensitivity to FX spreads using kdb, R.

Fidelity Investments | *Equity Sector Specialist Intern* Boston, MA | June 2017 – August 2017

- Assisted with 2 industry reviews (Indian Media, Plastics and Packaging) and 8 stock initiations; ran regressions in R

Amherst College Amherst, MA | September 2016 – May 2019

Department of Computer Science: Teaching Assistant; Department of Mathematics & Statistics: Grader and Teaching Assistant; IT Support Specialist; Libraries: Archives & Special Collections Assistant;

Harvard Forest REU: Data Provenance in R | *Software Developer* Petersham, MA | May 2016 – August 2016

- Developed cache feature with command-by-command tracing of dependencies; feature for RMarkdown file read-in.
- Presented software improvements to 50 plus Harvard Forest faculty; used R, Java, Apache Ant.