

Education

Aug 2013 – May 2016

Yale University Master's Degree | Architectural Sciences & Technology

- Dilworth scholarship for Outstanding Design & Academic Performance
- David Schwarz Fellow (Awarded based on portfolio & research proposal)

Sep 2008 – Mar 2013

University of Tehran Bachelor's Degree | Architectural Engineering

- 1st entrance rank & member of Exceptional Talents (Top 5% GPA)
- 99.999 percentile for Mathematics National Exam in Iran (69th among 300k participants)

Experience

May 2021 – Present

Software Engineer, Replica

Replica, formerly part of Alphabet's Sidewalk Labs, is a data platform for urban planners. As a software engineer on the Application team, I developed the infrastructure and interfaces for users to access and analyze geospatial data. I worked across the stack with a focus on the frontend.

- Planned, scoped, coordinated and built major user-facing features while working with product, design, and data engineering teams. Work included: API implementation & SQL backend; data fetching & processing hooks; GIS data visualization; data ingest & analysis interfaces; testing.
- Developed majority of frontend for Replica v2 from scratch. Designed new application infrastructure, set up state management strategy with custom hooks / SWR / React context, consolidated error handling, and revamped data visualization with Mapbox.
- Implemented user authentication using Auth0 and integrated Segment to manage user activity across multiple platforms.

Nov 2018 – Apr 2021

Architect, WRNS Studio

Developed large-scale projects from early concept to construction documents while balancing programmatic, technical, financial, and aesthetic parameters: reimagined educational spaces; created plans to rehabilitate a polluted site into a sustainable high-tech campus; designed a masterplan for a 200 acre mixed-use development.

Jun 2017 – Nov 2018

Architectural Designer, Perkins Eastman

Designed and developed various projects at the Stanford Medical Campus, including the construction phase of the \$2 billion New Stanford Hospital.

Jun 2016 – Jun 2017

Designer, M-Rad

Managed development of 10,000 SF high-end modern residential project in Beverly Hills. Led design from early conception through complete construction documents.

Skills

Python, TypeScript / JavaScript, Node.js, SQL / PostgreSQL, Ruby on Rails, Java
React, Redux, HTML, CSS, Material UI, MapBox

Projects

Tweet Streamer [Live](#) | [Github](#)

Node.js | PostgreSQL | PostGIS | Sequelize | WebSockets | JavaScript | React | MapBox | Material UI
Fullstack app displaying live stream, sentiment analysis, weekly history of ~1% of worldwide tweets.

- Engineered data pipelines to process ~5 million tweets/day & push to clients over websockets.
- Leveraged cron routine and PostGIS to store hourly geospatial aggregates in Postgres database.
- Designed and implemented user interface w/ React, Mapbox, and Material UI to display interactive tweet maps.

Lake Hopper [Live](#) | [Github](#)

Ruby on Rails | PostgreSQL | AWS S3 | REST APIs | JavaScript | React | Redux | MapBox | Material UI
Fullstack app for backpackers to save trips along with routes, photos, notes & activity analysis.

- Developed Rails server, API endpoints, Postgres database, and integrated AWS S3 to save images.
- Built custom .tcx parser w/ Javascript to extract activity data from smartwatch.
- Enabled custom route creation (with distance and elevation estimate) using MapBox GL & Google Maps API.