Kiana Hosseini
Software Engineer

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kianahosseini.com . Github . LinkedIn

Education

Aug 2013 - May 2016

Yale University • Master's Degree | Architecture
- 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 | Architecture
- 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 • San Francisco, CA

Node.js | TypeScript | React | Redux | Next.js | PostgreSQL | Clickhouse | Python | MapBox | Material UI

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.

- Set up onboarding plan and mentored new engineers in the team.

Nov 2018 – Apr 2021

Architect, WRNS Studio • San Francisco, CA

Python | Dynamo | Revit | Rhino | Grasshopper | Enscape | Photoshop | Illustrator | InDesign

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.

Skills

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

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.