KHINSHAN **KHAN**

Skills_

Languages Typescript, Javascript, Golang, Python, HTML, CSS

Frameworks React.js, Next.js, Gatsby.js, Chakra UI, Material UI, Express.js, Flask **Environments** AWS, Netlify, Digital Ocean, tRPC, GraphQL, Rest, DynamoDB, PostgreSQL

Work Experience

Kiip, PBC Brooklyn, New York

SENIOR SOFTWARE ENGINEER

Dec. 2022-Present

Dec. 2021-Dec. 2022

Dec. 2021-Dec. 2022

kiip.io and kiip.co (AWS Lambda, S3, DynamoDB, Chime, GraphQL, Next.js, MobX, Javascript, Typescript)

Kiip allows people to store digital copies of vital documents and share them in interactive data rooms when applying for services offered by the city or other public benefits and service providers, easing any potential times of crisis or extenuating circumstances.

- Designed robust and complex **React components** ranging from skeletal layout to chat messaging to meet **WCAG accessibility standards**
- Created a service for users to securely upload documents with 'zero knowledge' of its contents until a user with proper rights accesses it
- Established various **authorization models** for individual users to add assistants to work on their behalf to interact with representatives of organizations as well as varying levels of representatives of an organization

Two BullsBrooklyn, New YorkSOFTWARE ENGINEERJan. 2020-Jan. 2022

Port Management Tool (AWS Lambda, S3, DynamoDB, PostgreSQL, Golang, Typescript, React, Leaflet, Material UI, Node.js)

Working with Seacor Holdings, several of their ports now have ship detection and corresponding port events handled and searchable automatically via this tool and added to billing for Helm Operations orders for cross-examination and detailed view of ships' paths.

- Led cooperative agreements with data providers to create new APIs and selectively clean noise, handling 1,000,000+ daily AIS messages
- Implemented scalable and resilient microservice architecture (lambdas, databases (DynamoDB →PostgreSQL), S3, VPSs)
- Spearheaded aspects of the 'complex event processing' algorithm for port events and port calls with pipelines to smoothly incorporate new categorizations of vessels and geofencing which will affect port events used for billing
- · Worked on client product for port call search and display summary with an interactive vessel path visualization
- Initiated an internal algorithm visualization playback, playing around 100,000 records as a smooth animation at a time

Mailchimp Firebase Integration (Typescript, Firebase, GCP, Mailchimp)

Syncs user data with a Mailchimp audience for sending personalized email marketing campaigns. It was teased at Google I/O 2021 and presented at Google I/O 2022. The extension was open sourced by Mailchimp.

- · Headed initial development for alpha Firebase extension and tests (unit, integration, E2E) with GitHub Actions
- Developed Firebase extension to bidirectionally synchronize with Mailchimp tags, audiences, and events for personalized marketing

Notable Projects

Kays (Golang, PostgreSQL, Next.js, Chakra UI)

GitHub

Keep All Your Stuff: Managed Documents — Application and API service to securely upload and automagically analyze and tag documents for insights such as similarity percentage to other documents and categorization as well as provide an optimal search experience (in progress)

Political Atlas (React, Material UI, D3.js Python, Flask)

GitHub

Map To Politics — data visualization for textual (IBM Watson) versus vocal tone analysis of presidential speeches (DeepAffects)

- · Managed the architecting, coding, and learning schedule for team of 3 new programmers at a 2 week agile cadence
- Explored webhooks, cronjobs, restful design, accessible design, and securing VPSs with the team

Miscellaneous_

Ep 1: Authentication and Authorization, Guest

Spotify Podcast Episode

Discussion about Authentication and Authorization including Federated Login, SSO, JWTs, and best practices.

TPH Tech Spotlight: What is Emacs?, Spotlight Leader

Posterity Write-up

 $Introduce\ and\ guide\ programmers\ to\ editors\ with\ a\ focus\ on\ emacs,\ answering\ questions\ ranging\ from\ lisp\ to\ packages\ to\ window\ management.$

Interests uptogood.dev/blog

Blogging, cooking, linguistics, mythology, puzzles, fallacies, automation

Education

Hunter College, The City University of New York

New York, NY

BACHELOR IN COMPUTER SCIENCE, MINOR IN MATHEMATICS

Stuyvesant High School

New York, NY

ADVANCED REGENTS DIPLOMA WITH HONORS