Evan Kairuz

github.com/kairuz

(347) 525-8409
evan.kairuz@gmail.com
189 East 3rd Street #8
New York, NY, 10009

Freelance and Independent Development

JavaScript, Web Audio, WebAudioFont

March 2020 -> Current
New York, NY

Web Audio; Producing music compositions with Web Audio API.

Since early on in the pandemic I have been working on development projects related to music composition and education and gaming. I have produced music using javascript Web Audio API to arrange acoustic samples into compositions used for background music in presentations and online courses (Udemy).
I have built single page applications for interacting with music compositions and WebAudioFont MIDI audio.
I also have been working on indy game projects in vanilla javascript and threejs.
During this time I completed naturalization and am now a U.S. citizen.

Senior Software Engineer @ Medidata

Java, Python, AWS, Redis, Oracle, Redshift, Postgres

Dec 2018 -> Feb 2020
New York, NY

Web API; Lead on MEDS API, a Spring Boot REST API, serving secure endpoints.
AWS Step Functions Client; State Machine Activity Worker java client implementation.
Study Data Extraction; SDTM standard and custom dataset extraction services.
Clinical Datastore; Proprietary Clinical Study dataset stored as redis hashes.

At Medidata I was development lead on the MEDS API team. The API served as the primary mechanism for downstream dependent teams and services to access clinical trial data. The team consists generally of 2 senior engineers, along with another 3 or so junior and mid-level engineers.
MEDS API is a multi-module maven project, including a Spring Boot web API module, a Step Functions client module, a utilities module, and modules containing shared internals.
Routes are defined in OpenAPI and secured using SSH key authentication and Role-based access control authorization.
Redis is used as a cache and for distributed locking (Redisson client) for concurrency control.
I also became a lead engineer on the Centralized Statistical Analysis (CSA) project; a Data Science project measuring performance of Clinical Trial sites and drug trials. Much of the data for this project is made available via MEDS API routes, and AWS Step Function workflows. Dataset extracts in Study Data Tabulation Model (SDTM) standard are supported with relational databases while proprietary dataset extract formats are implemented using redis, making use of list and hash collection types. Data Science teams invoke routes and workflows and perform univariate and bivariate analysis on the extracted datasets. Development is governed by Gitflow workflow with heavy focus on code review. Generally 85%+ unit test coverage is required and all published routes and workflows are tested as Cucumber feature scenarios. Travis CI is kicked off for pull request, and GoCD pipeline on merged branches.
Application deployment and provisioning is managed by an in-house extension of Capistrano.

Data Engineer @ Hearst

Python, GCP, Looker BI, MSSQL, Bigquery

Feb 2017 -> Jun 2018
New York, NY

Apache Airflow Workflows; Implementing airflow data pipelines in python.
Ingestion Framework; Framework providing data ingestion from multiple sources into GCP/Bigquery.
Data Availability Sensor Framework; Airflow workflow sensor detecting data readiness and state.
Bigquery Data Warehouse; ELT data warehouse.
Looker BI Data Modelling and Visualizations; Developing Looker BI abstractions and dashboards.
Scheduled Reporting; Looker BI reporting API and scheduling.
Anomaly Detection and Alerting; Scheduled queries measuring standard deviation/zscores.

As a Data Engineer member of the Data Team at Hearst Newspapers I was responsible for data workflow orchestration (Apache Airflow) and visualizations (Looker BI). The team was made up of 3 data engineers, a data scientist, business analyst, and also partnered with other Hearst data teams.
I built an ingestion framework moving data out of the internal MSSQL into Google Cloud Platform (GCP). This involved using GCP services Google Cloud Storage and Bigquery. Looker BI integrates directly with Bigquery where it issues queries the results of which are made into data visualizations. These visualizations are used to measure performance of business objectives (i.e. promoting digital subscriptions over print), as well as to detect data anomalies.
Airflow sensors allow movement away from time-based workflow schedules to trigger-based execution of workflows and data is therefore consumed as soon as it is available, avoiding bottlenecks and conflicting ingestion schedules.
Looker dashboards are configured as scheduled reports.

java
-spring
-hibernate
-maven
-tomcat, jboss, play
-akka
-drools
-jsp, jstl, tiles, jasper
-aws
-gwt
-junit, mockito, mockmvc, wiremock

javascript
-nodejs
-threejs
-webaudio
-angular
-aws, herkou

python
-gcp
-airflow
-looker api
-jira, confluence

db
-oracle, mysql, mssql, postgres
-bigquery, redshift
-dynamodb, redis

tools / tech
-openapi, swagger
-cucumber bdd
-travis ci, gocd, github actions
-capistrano
-sumologic, zipkin
-aws, gcp
-redis
-jenkins
-git
-looker bi
-intellij idea, pycharm, webstorm
-jira, confluence
-crucible, fisheye

education
-Information Technology
-Cape Peninsula University of Technology
-Cape Town, South Africa
2002 -> 2005

interests / hobbies
-webgl, threejs, webaudio
-musical instruments
-rugby, mma, gaming

AVP @ OTC Markets
Java, Javascript, AWS, Redis, Informix, DynamoDB

Jul 2014 -> Mar 2016
New York, NY

Web Product Ownership; Ownership of client-facing websites otcmarkets, otciq, & otcquote .com.
CMS Implementation and Migration; Migrating in-house java CMS and template engine to Drupal.
Financial Disclosure Rule Engine; Java rule engine governing client financial disclosure requirements.
Reporting and ETL Ownership; Ownership of java ETL frameworks for various sources.
Client Onboarding; OTC client onboarding management and tracking tool.
Automated Testing; Selenium Page Object Model automated test suite.

As AVP (initially Senior Developer) at OTC Markets I headed up and owned all web projects Including the public website and client-portal and back-office applications, as well as services and ETL jobs.
I built a rule engine governing regular financial disclosure filing requirements. The particular types of disclosure as well as sources vary depending on whether the client companies file annually or quarterly. Clients failing to meet the disclosure requirement would be moved around OTC's brand tiers.
I worked on the client onboarding management where client companies would undergo strict compliance checks. I also worked with QA Engineers to design an automated test suite using the Page Object Model pattern implemented in Selenium Webdriver. I won the annual award for best team member in 2015.

Senior Developer @ Forex Capital Markets
Java, Javascript, Oracle, MySQL

Jul 2009 -> Jul 2014
New York, NY

dailyfx.com CMS; CMS built in java, hibernate, mvc, jaxb, previously opencms, alfresco.
FXCM Websites Templating Engine; Templating engine built in java, spring mvc, and apache tiles.
Social Media Integration; Dailyfx real time news, fxcm twitter, facebook integration.
Payment/Subscription Management; Payment and subscriptions for account funding.
Mobile App Integration; Integrating mobile app with customer mgmt service and payment vendor.
Security Integration for Partner SSO; SSO between Etrade and fxcm using PingFederate/SAML.
Geo Rule Engine; Drools rule engine governing customer experience based on geo location.

At FXCM I was a member of the development teams that built DailyFX.com CMS versions 2 and 3.
I implemented DailyFX's Real Time News twitter feed page, the most popular page on the site.
DailyFX was later sold to IG Group in 2016 for $40 million.
I led development on the templating engine for FXCM brand websites and all foreign subsidiaries.
I implemented FXCM websites' geolocation-based rule engine governing the customer experience, routing them to the appropriate site/page based geo location, marketing campaign, and/or device.

Developer @ Infocache Corp
Java, Javascript, Oracle, MySQL

Jul 2008 -> Jul 2009
New York, NY

Document Management System
Bibliographic Coding and Attorney Review Tools

Application Analyst @ Altech
Java, Oracle

Jun 2006 -> Jan 2008
Cape Town, South Africa

Vodacom (Vodafone) Subscriber Admin & Provisioning
Core Internal Monitoring and Alerting Apps/Tools

Junior Developer @ Kwanyama
Java, MySQL

Nov 2004 -> Jun 2006
Cape Town, South Africa

POS & Inventory System