Divij Sanjanwala

divijsanjanwala.com | divij.sanjanwala@mail.utoronto.ca | linkedin.com/in/divijsanjanwala | github.com/DivijSanjanwala

Technical Skills

Programming Languages: TypeScript, Javascript, Python, SQL, Java, C, AppScript, Java, Git, R

Technologies/Frameworks: AWS, ElasticSearch, GCP (Firestore, PubSub, Compute Engine), Vue.js, React.js, Node.js, Docker, Zapier, ReTool, Google APIs (Spreadsheets API), Django, MongoDB, Express, Looker Studio, Version Control, Ajax

Relevant Coursework: Algorithm Design and Data Structures, Deep Learning, Neural Networks, & Probabilistic Machine Learning, Multivariate Calculus, Linear Algebra, & Systems Programming (C)

Professional Experience

Agentnoon (YC W22), Toronto | Node.js, Vue.js, Google APIs, GCP, PubSub — **October 2022 – March 2023**
Software Engineer — *Toronto, Ontario*

- Led Analytics Engine to elevate platform experience by Integrating customer APIs within **24-48 hours** of feedback/acquisition.
- Designed a Real-time Internal Dashboard App to track internal KPIs and achieve week-on-week Sales Pipeline targets.
- Developed UI elements and Deployed cloud functions to automate HRIS integrations and improve user navigation time by ∼**50%**.

Cedience, Toronto | ElasticSearch, AWS (ECS, DynamoDB, S3), Docker, Postman — **December 2021 – January 2023**
Software Engineer — *Toronto, Ontario*

- Automated data-pipeline through AWS Job Instances to **reduce redundant efforts** of manually running workload by **90%**.
- Enabled intelligent searches on customer-requested sources by extraction and predictions of data-tags and filters from raw data.
- Designed scripts to query and bulk update entries in Foresight platform index to **increase accuracy** to **90-95%**.

ReSTORE Lab | React.js, MongoDB, Express, Agile Development — **September 2021 – July 2022**
Full Stack Engineer - Temerty Faculty of Medicine @ University of Toronto & UHN — *Toronto, Ontario*

- Designed a mobile-compatible web-app & a complementary interface to enable non-programmers dynamically update the web-app.
- Decreased web-app load times by **80%** via compressing and optimizing image loading API calls to refine the end-user experience.
- Catered to additional request-based features and pages for the web-app to meet the constantly changing needs in marketing.

Project Lead - The LockedDown Project | TensorFlow, HuggingFace — **May 2021 – August 2021**
Full Stack Engineer - Temerty Faculty of Medicine @ University of Toronto & UHN — *Toronto, Ontario*

- Leveraged ML to save **40+** hours of work and financial resources by avoiding manual text-classification.
- Fine tuned BERT Model (NLP) to perform sentiment analysis on **2500+** lockdown survey responses spanning 4 languages.

Publications and Projects

What Do Graph Convolutional Neural Networks Learn? | *PyTorch, TorchVision, numPy* — **January 2021 - May 2021**

- The paper explores how the GCN's learning of node-embeddings and performance in SSNC depends heavily on underlying node-neighbourhood graph structures using **homophily** as one of the metrics. https://doi.org/10.48550/arXiv.2207.01839

University of Toronto - On-call Engineer | *React.js, PostGreSQL, Data-Extraction* — **May 2023 - Present**

- Designed & Developed MVP for research proposals in equitable research/fieldwork placements in Occupational Therapy.
- Optimized scripts to scrape, classify, & extract entities by integrating XHR network-call scraping to reduce running time by ∼**20%**

Toronto Fitness Club | *React.js, Django, JWT, MapsAPI* — **September 2022 - December 2022**

- Designed User Stories and its REST API endpoints to handle bookings, scheduling, and subscriptions to a club membership.
- Developed database architecture optimizations to reduce tangled queries and response times by ∼**20%**.

Tech-Conference Software | *Java, Object-Oriented Design* — **January 2020 - April 2020**

- Designed a Tech-Conference Software implementation to help organise the event using messaging, enrolment, user creation/deletion, and organizational hierarchy features (Design Patterns, Fundamentals of Clean Software Architecture, and SOLID principles).

Complex GeoSpatial Models | *R (INLA, sf, tmap, raster, tidyverse, ggplot2)* — **March 2022 - April 2022**

- Designed tools to map Spatial Data structures by manipulating vector and raster data-forms.
- Explored Spatial auto-correlation between neighbouring counties using Besag-York-Mollié to predict the SIDS in North Carolina.
- Investigated Gaussian Random Fields to predict spatially continuous variable of Malaria prevalence in Gaussian Random Field.

Education

University of Toronto, St. George

Honours BSc. Computer Science, Statistics, and Economics

- UofT International Scholar Award (2019-2022), COVID-19 Student Engagement Grant Winner 2021 ($3000)