Mika Siddiqui

EXPERIENCE

Lead AI Specialist
Unsearch | January 2024 - December 2024

- Hired by Ex-Atlassian project manager to develop a complete AI web app called Verve
- Was the sole developer, implemented tech stack from ground up, advised best practices
- Created RAG based AI chatbot that retrieves web data based on search query, improves over time based on user preferences and displays via UI.

Co-Founder
Focia | September 2022 - Present

- Co-founded a VC backed machine learning startup to analyse and predict online content
- Created predictive models and deployed them for fast inference
- Managed the team, product development and vision
- Grew our userbase to over 10K MAU

Data Scientist
Mercury Energy | September 2020 - June 2022

- Develop complex models to increase customer lifetime value
- NZ's largest energy provider organization
- Work on Mercury Energy's largest data science initiatives using the latest technology stacks
- Developed customer segmentation, churn profitability and churn propensity models
- Leading the transition process of model management pipelines and Data Science best practices
- Involved in text analytics projects using BERT to extract themes and topics as well as NLP

Data Scientist
TRA | May 2019 - September 2020

- Developed analytical solutions for some of NZ's largest organizations
- Experienced using supervised and unsupervised machine learning models with large datasets
- R&D work involves working with cutting-edge technology to analyse and understand social trends
- Helped develop a SaaS product for TRA Labs that analyses a big dataset of real-time news articles, extracts themes, sentiment and emotion using NLP and Python. Built in Flask.
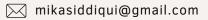
Digital Developer
Topham Guerin | March 2019 - May 2019

- Lead digital developer for political agency
- Developed full-stack websites, twitter bots and social media text analysis
- Used CMS tools such as Shopify, Wordpress, Google analytics suite and Python for data analysis

Data Science Intern
TRA | January 2019 - March 2019

- Worked on machine learning models and social media scraping to analyse the top cultural trends
- NLP techniques were used to analyse social media text
- Image recognition and object detection techniques were used to analyse social media images
- Supervised and unsupervised learning models were used for clustering similar themes

EDUCATION

University of Auckland | January 2015 - January 2019
- BSc in Computer Science and Statistics

ColumbiaX | June 2018 - September 2018
- Verified MicroMasters in Artificial Intelligence

Auckland Grammar | January 2010 - December 2014

TECHNICAL EXPERIENCE

Verve | January 2024 - December 2024
- Created Verve PWA using Typescript, PNPM, tRPC, Github and Vercel for deployment.
- Used OpenAI, Huggingface, AWS Lambda and Python for the LLM integration for chatbot.
- Use of AWS S3 and Supabase for storage, user authentication, vector storage and RLS.
- App can be accessed at beta.verveai.com.au

Focia | September 2022 - Present
- Created multimodal ML models to predict engagement of online content.
- Models were developed in Python. Used Transformers library.
- Supplementary regression models built using XGBoost.
- Backend API was developed using AWS S3, ECR, EC2 Lambda and Sagemaker.

FociaVLM | October 2023 - Present
- Developed custom trained, fune-tuned multi-modal LLM to analyse content.
- Foundation model built on Vicuna7B with CLIP encoders
- Trained using A100 GPUs on LambdaLabs. Deployed onto Sagemaker endpoint.
- Uses Lambda for inference and API gateway for users to interact with.

MYOB IT Challenge | May 2017
- Entered the MYOB IT Challenge consecutively for 4 years
- Have reached the Top 5 finalists every year
- Developed an iOS app for small to medium enterprises in Swift
- Used the machine learning toolkit NLTK in Python to analyse restaurant reviews
- Sentiment data was displayed on an online dashboard created using PHP, SQL, Nginx

ADDITIONAL EXPERIENCE AND AWARDS

TRA Case Competition | September 2019
- Judged the 2019 TRA x MCC Data Case Competition
- 6 Teams presented their case solutions around how data could be applied to the business world
- I participated on the judging panel to determine which teams presented the best solutions

Velocity Innovation Challenge | April 2018
- Developed a carpooling mobile app idea to solve the traffic congestion problem in Auckland
- Gained experience in planning and leading a startup business idea
- Gained valuable experience working in a team environment

LANGUAGES AND TECHNOLOGIES

- Python, Transformers, SQL, AWS, Tableau, Tensorflow, XGBoost, SpaCy, NLTK, Keras, NumPy, OpenCV2, BERT, Vercel
- Databricks, PySpark, MLFlow, Neo4J, Sagemaker, Lambda, S3, EC2, ECR, CloudFormation
- HTML, CSS Javascript, Node.js, React, Django, Flutter, Firebase, Supabase, Typescript
- Java, PHP, LaTeX, Next.js, PostgreSQL
- Adobe Photoshop, After Effects, Illustrator, XD