# **Matthew Kompel**

### Skills

### Languages/Frameworks:

Python, JavaScript, TypeScript, Java, C, SQL, HTML, CSS, React, Flask

# **Tools & Technologies:**

AWS Cloud Tools, MongoDB, LangChain, GitHub, Docker, GCP, Postman, Twilio

# **Professional Experience**

### Software Engineer Intern, STAN AI

May 2022 - Aug 2023

- Created a client dashboard web application that served as the main company interface for over 20 individual clients using React JS, Material UI, and Bootstrap
- Integrated homeowner portal accounting APIs into an SMS chatbot using Typescript, MongoDB, AWS
   Amplify, and Twilio to serve over 500,000 monthly active users
- Trained an NLP model in **GCP Dialogflow CX** to handle over 10,000 incoming messages each month automatically
- Refactored product codebases by using industry-standard microservice layered architecture to ensure code reusability and efficiency
- Implemented a web-socket-based chat bar to push over 400 live messages daily to clients using AWS
   EventBridge, AWS API Gateway, and MongoDB Triggers
- Assisted in the development of an embeddings model for fetching accurate information from over 200
  community regulations documents using a Python backend with the LangChain framework

### Teaching Assistant, Queen's University

Sep 2023 - Present

- Teaching team for a Computer Architecture course with over 200 undergraduate Computing students
- Covered important assembly language and data representation concepts through weekly office hours and email communication

# **Projects**

## SMS AI Campus Assistant, QHACKS Hackathon

- Used **AWS Lambda**, **JavaScript**, **GCP Dialogflow**, and **MongoDB** to create an automatic response SMS assistant to handle campus inquiries and mental health concerns for students
- Developed a front-end application using **React JS** to show off the product features and provide a way for students to sign up

### Stock Sentiment Analysis Tool, Web Development Club Project

- Pulled live stock market statistics via API to allow users to make informed investment decisions using Python
- Used a web application front end to organize important metrics and graphs, as well as display market trends using **React JS**

#### Riddle Mobile App, Personal Project

- Created a mobile application that generates a random riddle daily for all users to solve using **MongoDB**, **Express, React**, and **Node**
- Implemented user account logins to track performance on past riddles and store individual statistics

# **Education**

# Bachelor of Computing (Honours), Queen's University

Sep 2020 - May 2025

- GPA: 4.0 on a 4.3 scale
- Relevant Coursework: Data Structures, Software Architecture, Java OOP, Operating Systems, Algorithms