Harsh Topiwala

linkedin.com/in/htopiwala/ **in** github.com/Harsh-Topi Ω

EDUCATION

University of Guelph

Bachelor of Computing, Computer Science, Honours. GPA: 3.7/4.0

o Dean's Honours List: Jan 2020, May 2020

Guelph, ON, Canada 2019 - 2024 (Expected)

SKILLS

Languages: Java, JavaScript, C, Python, Swift Technologies: Node.js, React, Express.js, Next.js

Frameworks/Tools: Git, PostgreSQL, Google Cloud Platform

EXPERIENCE

Intern. House Toronto, ON

Software Engineer

January 2020 - July 2020

- $\circ~$ Developed a platform for interns to search through job and housing listings while networking with others
- $\circ~$ Used Node.js and PostgreSQL to implement REST API's which allowed users to login, register, view and update their profiles and settings
- Utilized AWS Lambda and BeautifulSoup to scrape 2000+ jobs and housing listings from AirBnB, Zillow, and Indeed
- Conducted Agile stand-up meetings with a team of 6 remote engineers to identify limit blockers, maintain sprint velocity, and improve overall software quality through standard Scrum methodologies
- o Leveraged Knowledge in Node.js, Next.js, React, Python, SQL

PROJECTS

LyricNet

Python, Flask, React, TensorFlow

- Built a web application which generated/auto-filled lyrics based on existing input and answered questions in the style of over 30 artists
- Allowed users to specify an artist, which was not pre-trained, to be trained on the spot using song lyrics pulled from Genius.com using their API
- Used a recurrent neural network to memorize sequences of characters from a set of songs to predict the most probable character in a sequence, alongside a Markov chain model to ensure 100% of the outputted lyrics were real
- o Trained and utilized a BERT language model to answer a given question in the style of a chosen artist

Morno - Morning Routine App

Swift, Core Data

- Utilized the Model-View-Controller methodology to build an iOS application which allowed users to set morning routines, read news, and browse specific recipes depending on the time of day
- Used OpenWeather's API to provide weather updates based on location data alongside Spoonacular's Recipe API to display recipes with a nutrition analysis and cost breakdown of ingredients
- Implemented Core Data to create data models which allowed users to save and access recipes, news articles, morning routines, and preferences

EXTRACURRICULARS

David Suzuki Robotics

Toronto, ON

Team Lead and Programmer September 2017 - January 2020

- Administered a group of 35 students to successfully build 2 competition-standard robots through multiple seasons
- Brought in \$5,000 in sponsorship funding to heighten the financial budget of the team, which significantly improved the durability of our robots resulting in 2 championship wins
- \circ Taught 20 students how to program control systems using Python which allowed for quick adjustments to be made by anyone on the team which decreased turnaround times by 35%
- Uploaded 11 video tutorials which covered fundamental design and technical concepts to ensure team members had an understanding of essential skills required to build a competitive robot