Vichara Nimnaka Wijetunga

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Programming Skills

Languages: Python, Javascript, Java, C++, PHP, SQL

Technologies & Tools: Flask, NodeJS, Git, PostgreSQL, Redis, Snowflake, Airflow, Matillion, AWS, UNIX, Docker

Experience

SnapTravel   Toronto, ON
Data Engineer   *January - April 2019*

- Designed and Implemented three key ETLs: **Supplier Availability**, **Supply/Demand** and **Expired Rates**
  * Through the extraction & transformation of raw request data these ETLs pushed our Data Warehouse size from **500GB to over 9TB**
  * Worked with our lead Data Engineer to incorporate **Airflow** to mange these large tasks into DAGs allowing for parallelism and daily runs
  * Leveraged our Data Warehouse: **Snowflake** to cluster columns with **low cardinality** (in the resultant ETL tables) improving **querying times by 40%**
  * Increased the scalability of these ETLs by using Snowflake to **Bernoulli Sample** the raw data, reducing the ETL **runtimes by approximately 80%**
  * Worked alongside Data Analysts to **visualize ETL data** (using **PeriscopeData**) into **SOV** (Share of Voice) and **Spread-to-Bar** reports, which were used to present key metrics to SnapTravel **suppliers and potential partners**
- Consumed **Expired Rates** ETL data to build a **Python (Flask)** internal tool to apply increased margins for suppliers with high error ratios
- Created an **SLA** (Service Level Agreement), for internal users of the ETL data, guaranteeing a **99.9% data pipeline uptime**

The Weather Network   Oakville, ON
Software Developer   *May - August 2018*

- Implemented **AMP** (Google's Accelerated Mobile Pages), reducing forecast page load times by **1.5s** (mobile)
- Introduced data aliasing for **PHP** endpoints, reducing API request time by **0.5s** (client side)
- Implemented the **MVC** design pattern for backend API's, using the **CodeIgniter** (PHP) framework
- Built **RESTful API** endpoints for displaying news articles provided by the **CMS**

Projects

Housr ⦿
PennApps, Runner-Up: Best Campus Life Hack

- Web-app to rank/display nearby real-estate (for sale) based upon three criteria: distance, price, and physical appearance
- Tensorflow **CNN** (custom model) for image classification, **Node** Backend, **Google Cloud API** (maps)

CryptoConsensus ⦿
Hack the Valley, Runner-Up: Best use of Azure

- Crawls Reddit for threads related to specific crypto-currencies and returns the public opinion of these coins
- **Node** application for Reddit Crawling, **Express** Server, **Azure** sentiment analysis training

Education

University of Waterloo   Waterloo, ON
Bachelor of Software Engineering; CGPA: 3.86   *Sep. 2017 – Present*

Achievements

Coursera Princeton Algorithms (Part I & II) ⦿ : Implemented complex **Algorithms** and **Data Structures**

2016 **SHAD** Carelton participant

Silver and **Bronze** Recipient of the **Duke of Edinburgh Award**