Hong Kun **Tian**

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Skills

Programming Languages	Python, Java, C/C++, C#, Javascript, OCaml, MIPS Assembly Language, Bash, PostgreSQL
Libraries & Frameworks	scikit-learn, PyTorch, Matplotlib, NumPy, Pandas, ASP.NET, React, Gatsby, HTML5, CSS3, Sass, Node.js
Tools & Platforms	Git, Netlify, Azure DevOps, LaTeX
Languages	English, French, Mandarin

Work Experience

Software Development Intern @ UMAknow   *Montreal, Canada*
C#, ASP.NET, VISUAL STUDIO, HTML5, CSS3, JAVASCRIPT, AZURE DEVOPS   *Jun. 2019 - Aug. 2019*

- Developed a RESTful API for Cloudockit using ASP.NET Framework, through which end consumers can trigger document generation.
- Built an interactive page using HTML, CSS, Javascript through which end consumers can visualize and interact with the API's endpoints.
- Developed automated acceptance tests that detected irregularities and unwanted changes within template documents and generated documents using Aspose file management APIs, improving the robustness of code deployment.
- Participated in various Agile Scrum methodologies.

Projects

Mini-projects @ McGill University Applied Machine Learning Course   *Montreal, Canada*
PYTHON, SCIKIT-LEARN, MATPLOTLIB, SEABORN, NUMPY, PANDAS   *Jan. 2020 - Ongoing*

- **Project 1:** Implemented Logistic Regression and Naive Bayes to classify targets from datasets acquired from UCI Machine Learning Repository.
  - Built Logistic Regression and Naive Bayes models from scratch.
  - Investigated several feature engineering techniques on the datasets to improve the models' performance.
  - Conducted experiments, such as testing different learning rates, and measuring their accuracies as a function of the size of the training size.
- **Project 2:** Investigated various multi-class classification models on textual datasets
  - Preprocessed datasets by vectorizing terms and applying TFIDF weighing.
  - Investigated performance of Logistic Regression, Decision Tree, Support Vector Machine, AdaBoost, and Random Forest models from scikit-learn on two textual datasets.
  - Performed hyperparameter tuning using randomized search with cross validation to achieve best possible performance for each model.

Personal Portfolio Website @ www.hongkuntian.com   *Montreal, Canada*
REACT, GATSBY, SASS, NETLIFY, GRAPHQL   *Jan. 2020 - Ongoing*

MindBook @ ConUHacks 2020   *Montreal, Canada*
REACT, CSS3, IBM TONE ANALYZER, NODE.JS, FIREBASE   *Jan. 2020*

Summary: Journal logging web app that performs sentiment analysis and provides recommended activities based on the predictions.
- Built the client-side UI using React and CSS.
- Hooked up Firebase to our Node.js backend to save journal entries from users.
- Implemented IBM Tone Analyzer API and business logic to provide appropriate suggestions to users.

TravelCC @ Hack The North 2019   *Waterloo, Canada*
JAVA, FIREBASE API, XE CURRENCY DATA API   *Sep. 2019*

Summary: Automatic foreign currency conversions through a smartphone's camera. (Android app)
- Implemented API calls to Firebase API and XE Currency Data API.

NLPure @ McGill CodeJam 2018 — First Place Overall   *Montreal, Canada*
KERAS, SCIKIT-LEARN, REACT, NODE.JS   *Nov. 2018*

- Text toxicity detection built using Keras.

Education

McGill University — B.Sc. in Honours Computer Science   *Montreal, Canada*
CUMULATIVE GPA: 3.64/4.00   *Sep. 2018 - Exp. May 2021*

Marianopolis College   *Montreal, Canada*
GLOBAL R SCORE: 35.662   *Sep. 2016 - Winter 2018*

- **Dean's List (All semesters):** Overall grade average of 85% and above and completion of courses required by the program for that semester.