RON HU

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EDUCATION

Bachelor of Applied Science and Engineering, 3rd Year | Computer Engineering Sept. 2018-Present
University of Toronto, St. George Campus

Self-Taught: CS109 Data Science (Harvard University Online), SQL for Data Science (UC Davis Coursera)

SKILLS & ABILITIES

- **Programming:** C, C++, SQLite, Python (Pandas, Matplotlib, NumPy, Sckitlearn…), Flask
- **Technical Data Science Skills:** Data Wrangling, Data Visualization, General Exploratory Data Analysis, SVD Dimension Reduction, Linear Regression, k-Nearest Neighbors, Cross Validation
- **MISC:** MS Office, Jupyter Notebook, AWS (familiar), git, SVN (familiar), Adobe Premiere and Photoshop

PROJECTS

Web format of Recent Projects: https://ronwho.github.io/cv/project/

Various Exploratory Data Analysis (https://github.com/ronwho/Data-Science)

• EDA topics include: effect of time elapsed on gene expressions, pollster bias, and picking baseball players using regression
• Worked on mini learning projects to learn material such as k-NN classification and cross validation on datasets from sklearn
• All my work was done on Jupyter Notebook and detailed descriptions of each EDA can be found here

ThoughtBubble (https://github.com/ronwho/ThoughtBubble)

• ThoughtBubble is a blog web application where users can post snippets of their everyday philosophical thoughts
• Currently, users can login and register accounts (with error checking), update their profile pictures and account details
• Built using Python and microframework Flask

Direct: GIS System (Project Manager)

• Direct is a geographical information system that allow users to search for intersections or points of interests (restaurants, hospitals, etc.) and also find the shortest route between two intersections for up to 20 different cities in the world.
• To implement finding the shortest route function, A* algorithm was used. Annealing and multi-threading was also used to optimize the calculation for an "Uber-like" scenario.
• This was written in C++ and uses EZGL for UI
• Used Git extensively

PhotonRock

• Collaborated with a team of five to invent a timing device to track the split time of curling rocks from distance A to B on an ice sheet for the Hong Kong Curling team
• Wrote project requirements and conceptual design specification documents to methodically approach the final solution
• Utilized laser signal receiver and Arduino to detect time taken to travel from point A to B

WORK EXPERIENCE

MetaShare Inc, Software Technical Writer (www.metashare.com.cn) May- June 2019

- Developed educational content (documents and PowerPoints) about Model Driven Development
- Created videos introducing core concepts of Model Driven Development and company's new ERP system Learned the concepts of Business Case Modelling, Business Process Modelling, and Domain Modelling and Unified Modelling Language concepts (UML)
- Used SVN extensively

Geering Up UBC, Instructor 2018

- Educated a class of 30 students about science and engineering
- My course material emphasized on how to problem solve
- Created activities to encourage active learning