Hantang Li

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EDUCATION

UNIVERSITY OF TORONTO
Master of Science in Applied Computing
Sep 2022 - May 2024 | Toronto, ON

UNIVERSITY OF TORONTO
Honours Bachelor of Science, Computer Science Specialist
Data Science Specialist
Sep 2017 - May 2022 | Toronto, ON
Cum. GPA: 3.90/4.00

COURSEWORK

Computer Networks (ongoing)
Storage Systems (ongoing)
Operating Systems
Computer Organization
Algorithm Design and Analysis
Software Design
Programming on the Web
Databases
Business Software
Introduction to Image Understanding
Uncertainty & Learning
Data Science I & II
Stochastic Processes
Reinforcement Learning
Neural Networks and Deep Learning,
Data Analysis I & II
Design and Analysis of Experiments
Principles of Programming Languages
Advanced Calculus
Linear Algebra I & II
Probability & Statistics I & II
Introduction to Psychology

LINKS

WebSite:// **hantang_li**
Github:// **Hantang-Li**
LinkedIn:// **hantang-li**

SKILLS

PROGRAMMING
Python • R • Java • C
JavaScript • Git • Bash
Docker • SQL • LaTeX

LIBRARIES
NumPy • Pandas • PyTorch • MONAI
Matplotlib • Plotly • seaborn • ggplot2
OpenCV • FFmpeg • Robosuite

HONOURS

2018 - 2022 Dean's List Scholar for all school years

RESEARCH AND WORK EXPERIENCE

SUNNYBROOK HEALTH SCIENCES CENTRE | Research Assistant
May 2021 - July 2022 | Toronto, ON | BrainLab | Supervisor: Maged Goubran

- Focus on using Generative Adversarial Networks and Convolutional Networks to translate Multiphase CT angiography to CT perfusion images.(Python, Pytorch, NiBabel, MONAI)
- Processed clinical 3D CT data for the UNETR Pytorch model training pipeline.
- Conducted literature review, preprocessed the data, and analyzed patient information.

HUAWEI NOAH'S ARK LAB | Software Engineer
May 2020 - May 2021 | Markham, ON | Work as PEY co-op student

- Focused on solving computer vision problems, building ML systems, and contributing to Video Content Tagging on Huawei Cloud. (Python, PyTorch, Pandas, NumPy, Django, JavaScript, Docker)
- Developed multiple data preprocessing pipelines to process raw data for model training and testing.
- Trained image and audio classification models for a classification system to classify different categories of contents.
- Improved data analysis and visualization pipeline for model's test results.

PROJECTS

EXPLORATION OF MUSIC OBJECT DETECTION USING DETECTION TRANSFORMER | Jan 2021 - May 2021

- Used the Transformer-based model Detection Transformer (DETR) on music object detection and compared it with Faster R-CNN. (PyTorch)
- Analyzed the structure of the model, the encoder and decoder weight heat map of DETR.
- Inferred the different performances of DETR on cropped and uncropped sheet music images, tuned the DETR model, and gave suggestions on improving the potential methods of DETR in music object detection.

SIDEWALK LABS DATA VISUALIZATION | Jan 2020 - May 2020

- Provided data analysis and visualization tools to help customers who used numina sensors make decisions. (NumPy, Pandas, PyTorch, Matplotlib, Plotly)
- Developed a page to display the path heat map of travellers and objects and the dwell time distribution of selected areas.
- Worked as the team leader, established team workflow, and integrated the work results into an overall website.

JERRYUP CAMPAIN MASTER | Product design, Market analysis
Sep 2021 - Dec 2021 | Markham, ON | DCSIL

- Communicated between our developing team with RBC customers and course instructors on improving our product.
- Conducted in-depth research on our market, competitors, customers, and built financial modelling.