Brandon Haw

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EDUCATION

GEORGIA TECH
M.S. CS - Machine Learning Grad. 2018 | Atlanta, Georgia

QUEEN'S UNIVERSITY
B.A.Sc - Mechanical Engineering Grad. May 2012 | Kingston, Ontario
Thesis: "Intelligent Monitoring of Assembly Automation using Machine Learning".

LINKS

LinkedIn:// **brandonhaw**
Personal:// **brandonhaw.com**
GitHub:// **databran**

COURSEWORK

GRADUATE
Machine Learning
Reinforcement Learning
Machine Learning for Trading
AI for Robotics
Knowledge Based Artificial Intelligence
Computer Vision
Data and Visual Analytics
Software Architecture
Graduate Algorithms

UNDERGRADUATE
Numerical Analysis
Programming for Robotics
Linear Algebra
more

TOOLS

Python • Tensorflow • Pytorch
fastai • R/Rstudio • Matlab
JavaScript • React • D3.js
MongoDB • SQL, Postgres
C, C++ • Java • Git/Github

SKILLS

Machine Learning • Deep Learning • Linux •
Reinforcement Learning •
Computer Vision • Artificial Intelligence • Data Visualization
Data Science

EXPERIENCE

SIEMENS CANADA
Internal PLM Consultant Sept. 2015 – Sept. 2016 | Oakville Ontario

- Improved the manufacturing and engineering efficiency of Siemens through the deployment of Siemens owned PLM software as a member of the Product Lifecycle Management team
- Conducted site visits and interviews in various Siemens plants to map all business and engineering processes and their associated IT/software systems
- Aligned software solutions to business requirements, targeting high potential areas first to expedite results
- Developed a deployment plan best suited for the client's needs

Engineering Project Support Jul. 2013 – Sept. 2015 | Oakville Ontario

- Created a model to analyze the financial data and generate quarterly reports for over 100 projects in order to target projects for review
- Created and implemented comprehensive models used by executive management which improved the quality of reporting and enabled more accurate project tracking
- Conducted internal project reviews in order to uncover root causes to project issues. Proposed corrective action which led to a recovery of $600K in costs for one particular project

UNIVERSITY OF TORONTO
Research Technician Jan. 2012 – Apr. 2012 | Toronto, Ontario

- Worked as a research technician in the Advanced Materials Lab at the University of Toronto
- Performed in-situ X-ray analysis of glass-fiber foam under various loading scenarios to characterize the foams response to stresses

QUEEN'S UNIVERSITY
NSERC Research Scientist Apr. 2011 – Sept. 2011 | Kingston, Ontario

- Developed and implemented a program in MATLAB that more quickly and accurately processed images depicting void nucleation in Micro XCT images of dual-phased steels, reducing the amount of resources required for raw image processing
- Increased the versatility of the Micro XCT x-ray scanner by designing and fabricating a machine extension using SolidWorks, enabling a wider range of samples to be tested
- Designed custom stress testing equipment using SolidWorks
- Performed failure analysis and quantified a variety of stresses in metal samples, using a self-written code in MATLAB

PROJECTS

39BRANT 2019 – Present | Toronto, Ontario
A startup aimed at using state of the art language models (ex. BERT) to analyze live data to extract value. Goal is to track 'topics', how they form, evolve, and ultimately influence sentiment.

SODUH 2018 | Toronto, Ontario
A startup that used computer vision to create 3D models of customers and clothing then matched them using machine/deep learning. Goal was to improve confidence when shopping online by taking a more wholistic approach to fitting.

THESIS - FAULT DETECTION IN MANUFACTURING 2012 | Kingston, Ontario
Created an algorithm using C++/MATLAB capable of detecting faults or abnormal conditions in a manufacturing environment using computer vision and machine learning

DESIGN/FABRICATION OF AUTOMATED WALKER 2011 | Kingston, Ontario
Designed and built an innovative, autonomous, assistance-providing walker to be used for rehabilitation purposes. Used C++, Matlab, Robot OS. Designed using SolidWorks. Won design competition and presented to Ontario Centre's of Excellence.