T. RILEY DAWSON

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github.com/gnarlywhale

EDUCATION

University of Alberta

MBA\MEng (Computer Engineering; Expected)

2019 - 2023

MEng focus on Reinforcement Learning

上智大学 - Sophia University

Summer Session in Asian Studies

Summer 2014

University of Alberta

BSc Eng - Software Option

2008 - 2014

PROFESSIONAL EXPERIENCE

The Bionic Limbs for Improved Natural Control Lab, University of Alberta

Software Engineer In Training

Oct. 2016 - Present

Supervisors: Dr. Craig S. Chapman, Dr. Jacqueline Hebert, Dr. Patrick Pilarski

Primary focus is on developing Gaze and Movement Assessment (GaMA), a robust software platform for universal multimodal motion data analysis.

Diesel Tech Industries

Software Engineer In Training

June 2015 - October 2016

Fully designed and implemented a web-based application for tracking employee hours

Common Grounds Arts Society

Android\iOS Developer

April 2014 - July 2014

Sole developer of the official "Found Festival" app

CONFERENCE PRESENTATIONS & WORKSHOPS

- 4. Cuthbertson L., Kearney A., **Dawson T.R.**, Zawaduk A., Cuthbertson E., Gordon-Tighe A., Mathewson K. Women, politics and Twitter: Using machine learning to change the discourse. To be presented at the Neural Information Processing Systems Foundation (NeurIPS) Conference (2019). Vancouver BC. Under Review.
- 3. Boser Q., **Dawson T.R.**, Lavoie E., Valevicius A., Pilarski P., Vette A., Chapman C., Hebert J.(2019). Characterizing the Eye Gaze Behaviour of Body-powered Prosthesis Users. ISPO Canada RehabWeek (Abstract and Oral Presentation).
- 2. Boser Q., **Dawson T.R.** (Presenting Author), Valevicius A., Vette A., Pilarski P., Hebert J., Chapman C. (2018). A flexible software platform for integrating eye tracking and motion capture data for measuring human movement behaviour in a reconstructed 3D environment. Presented at the Canadian Action and Perception Network (CAPnet) Canadian Physiological Society (CPS) Satellite Symposium at the Canadian Association for Neuroscience (CAN) Conference. Vancouver BC.
- Stone S.A., Dawson T.R., Boser Q., Hebert J.S., Chapman C.S. (2018). Using Lab Streaming Layer to collect synchronized multimodal datasets. Presented at the Canadian Action and Perception Network (CAPnet) Canadian Physiological Society (CPS) Satellite Symposium at the Canadian Association for Neuroscience (CAN) Conference. Vancouver BC.

PERSONAL PROJECTS

AXIS Reloaded

University Of Alberta Faculty of Engineering

September 2019 - October 2019

Design and development of control software for a robotic display platform

aNAOmate

Edmonton Catholic School Board

July 2019 - August 2019

Directed design and implementation of a simplified control interface of Nao robotic platform for elementary education applications

VR MariNAOette

ISARC Constructing Futures Hackathon

May 2019

Integration of a cloud-based image classifier with the Nao robotic platform

HumanMachine

Edmonton Fringe Festival

April 2014 - July 2014

Created MariNAOette robotic control interface and piloted robotic performance for the HumanMachine Artificial Intelligence Improv show

ATLAS

Angular Attack 48 Hr Hackathon

May 2016

Produced an online visualization tool for global census data

AWARDS

ISARC Constructing Futures Hackathon - 1st Place (\$1000)	May 2019
Jason Lang Academic Scholarship (\$1000)	August 2010, 2013
Stowkowy Scholarship in Engineering (\$1500)	August 2010
University of Alberta Academic Excellence Scholarship (\$1250)	August 2008

GRANTS RECEIVED

Campus Alberta Neuroscience, "CAN Entrepreneurship Seed Grant", \$29,596

July 2019

VOLUNTEER & SERVICE

University of Alberta Faculty of Engineering Open House Volunteer	October 2019
UAlberta Move-In Day Volunteer	September 2019
WISEST Workshop Leader	February & November 2019
South Sudanese Youth of Canada Conference- Photographer	July 2018
FIRST Lego League Competition Judge	January 2019 & January 2018

TECHNICAL STRENGTHS & EXPERIENCE

Languages English (Fluent), French (Intermediate), Japanese (Beginner)

Computer Languages & Software MATLAB, Python, JavaScript, C#, Java, IATEX

Experimental Techniques Motion capture, Eye tracking, Data Analysis