MONICA (MENGQI) LI

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EDUCATION

Ph.D. in Computer Engineering

Polytechnique Montréal

MIST Lab Advisor: Prof. Giovanni Beltrame

2023 - Current

- SLAM tasks with 3D reconstruction
- Cooperative manufacturing assembly with mobile cobots
- Use representative learning to design specific control strategies for multiple agents, GPA: 4.0

M.Sc in Computer Science Bishop's University

Advisor: Prof. Madjid Allili

2020 - 2022

- Research in human motion recognition and computer vision
- Thesis: Human action recognition with feature-embedding graph convolutional network.
- Extra credits in undergraduate computer science and mathematical courses, GPA: 93.6/100

M.A. in Comparative and Public History

Chinese University of Hong Kong

Advisor: Prof. Chiu Peng-sheng

2014 - 2015

Established a dataset for Ba County Archives (General Research Fund #14402414)

B.B.A IN ACCOUNTANCY

The Hong Kong Polytechnic University

2009 - 2013

- Mass data collection from SEC database for Prof. Simon Fung Yu Kit's accounting research in labor union
- Exchange program to Anderson School of Management, University of New Mexico in 2011
- Exchange program to National Taiwan University in 2012 Academic Advisor: Prof. Audrey Hsu

RESEARCH EXPERIENCE

City University of Hong Kong

3D Motion Capture Laboratory

Supervisor: Dr. Howard Leung

Research Assistant

May 2018 to Sep 2020

- Adopted graph centrality and motif to augment the original graph convolutional network (GCN) for motion classification tasks.
- Developed an algorithm to quantify features of online Chinese handwriting, including slant/tilt, horizontal/vertical alignment, deviation of size and pressure.
- Utilised SPSS for traditional statistics analysis.
- Recorded 20 subject EEG data for handwriting ability assessment and understanding.
- Ad-hoc consultancy for two individual undergraduate final year projects and three group final year projects.
- These projects led to the submission of 4 publications.
- Synchronized the data recorded from a Pendo graphic tablet(PH1410 Digit-Note) and an customized Pupil Labs eye tracker.
- Extracted data via Openpose for screening special education need students for certain tasks.
- Recruited primary school students and contact their parents for experiment arrangements.
- These projects led to the submission of 1 publications.

AWARDS AND PROFESSIONAL QUALIFICATIONS

- Vanier Canada Graduate Scholarships (Vanier CGS) Natural Sciences and Engineering Research Council
- Bishop's University Single Nomination for Arbour Foundation scholarship
- Bishop's University International Student Entrance Grant
- Faculty Exchange Sponsorship 2011 and 2012

INDUSTRIAL EXPERIENCE

Pratt and Whitney Canada - Technology Collaborative Office

Longueuil, QC, Canada

Internship - Collaborative research projects coordination & technology management process improvement May 2023 - Sep 2023

- Design compliance and internal control procedures for intellectual property transfer.
- Contacted the balloters for the procedures.
- Deploy the control procedures to corporate WEBCON.

PricewaterhouseCoopers Hong Kong

Assurance - Financial Service, Hong Kong Office

Associate Auditor

Sep 2015 - Jun 2017

- Work on several annual auditing projects for banks, insurance companies and mutual funds.
- Conduct an IPO for a listed company.
- Perform compliance regulation checks for two investment banks.

Ernst & Young Hua Ming LLP Shanghai Branch

Shanghai, China

Internship – Assurance Aug 2014

• Bank and financial lease confirmation work to ensure the client's debt status.