AIDAN YANG

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Citizenship: **Canadian**

EDUCATION

Bachelor of Applied Science, Engineering and Mathematics Dual Degree, Queen's University   **2016 – Present**
- Specialization in Electrical and Computer Engineering
- One school year of professional internship (2019 Sept – 2020 May)
- Expected graduation: 2021 June

RESEARCH EXPERIENCE

Undergraduate Researcher, Queen's University, Kingston, Canada   **2019 Summer**
- Investigated mobile development documentation artifacts with **Prof. Ying Zou** and **Prof. Ahmed E. Hassan**
- Built 6 machine learning models to determine developer pattern across 2,232 open source apps
- Clustered 69,851 app updates of 2,232 apps into 6 patterns based on developer behavior

Undergraduate Researcher, Queen's University, Kingston, Canada   **2018 May – 2019 May**
- Investigated Behavior Driven Development with **Prof. Daniel Alencar da Costa** and **Prof. Ying Zou**
- Applied reinforcement learning techniques to model code repository behavior from 133 GitHub projects
- Customized an NLP algorithm to establish links between test documentation and source code
- Accepted peer-reviewed paper at **MSR 2019**

INDUSTRY EXPERIENCE

Embedded Systems Developer, Advanced Micro Devices (AMD), Markham, Canada   **2019 Sept – Present**
- Developing graphics card driver software on the Display Abstraction Layer team
- Kernel mode debugging on Windows OS using WinDBG
- Low level programming of hardware devices using C and C++

Investment Banking Analyst, GF Securities, Guangzhou, China   **2017 Summer**
- Advised initial public offering (IPO) transitions for clients of the industrial group
- Researched client investments using various financial models
- Monitored client finances through auditing financial statements

TEACHING EXPERIENCE

Teaching Assistant, Queen's ECE Department, Kingston, ON   **2018 Winter**
- Assisted **Dr. Ying Zou** by holding tutorials and proctoring quizzes for ELEC278 (*Data Structures and Algorithms*)
- Performed weekly lab duties and guide 40 second year students per week write C programs
- Held one-on-one tutorials for struggling students and raised 3 students averages by over 10%

Private Tutor, Queen's University, Kingston, ON   **2018 Winter**
- Tutored 2 second year students *Introduction to Real Analysis*
- Tutored 1 second year student *Objected Oriented Design*
- Tutored 1 first year student *Introduction to Computer Programming*

Piano Instructor, Mount Royal University, Calgary, AB   **2015-2016**
- Employed by **Dr. Peter Jancewicz** to tutor 4 beginner level students for 2 summers

VOLUNTEERING EXPERIENCE

Software Developer, Queen's Technology and Media Association, Kingston, Canada **2018 Winter**
- Built an Android AR application that uses computer vision to scan any room and furniture

Pianist, Fountains of Mission Retirement Residence, Calgary, Canada **2014-2016**
- Lead 13 high school students to perform music at the local senior home to the elderly every week

PUBLICATIONS

Predicting Co-Changes between Functionality Specifications and Source Code in Behavior Driven Development
Aidan Z. H. Yang, Daniel Alencar da Costa, Ying Zou
The 16th International Conference on Mining Software Repositories (acceptance rate = 25%)

AWARDS

- Alberta Alexander Rutherford Scholarship ($2000 per semester for first two years of university)
- **1 of 9** finalists for Alberta Pianofest Society 2016 (international award)
- **1st** place Alberta Kiwanis Festival 2015 (provincial award)
- **4th** place piano solo performance at Canadian Music Competition 2014 (national award)

LANGUAGES

- Programming Languages: **Python, R, SQL, C++, C , Java**
- Native proficiency with **Mandarin** and **English**
- Professional working proficiency with **Cantonese**, limited working proficiency with **French** and **Spanish**