# **AIDAN YANG**

a.yang@queensu.ca | https://aidanby.github.io | 403-975-9757

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)
- 4<sup>th</sup> 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