Aidan Yang

https://aidanby.github.io/

EDUCATION

Queen's University

Kingston, Ontario

Bachelor of Applied Science, Engineering and Mathematics Dual Degree

Expected graduation: 2021 June

Email: a.yang@queensu.ca

RESEARCH EXPERIENCE

Queen's University CS Department

Kingston, ON

 $Software\ Engineering\ Researcher$

Summer 2019

- o Investigated mobile development documentation with Prof. Ying Zou and Prof. Ahmed E. Hassan
- Built 6 mixed effect models to determine release pattern across 2,232 open source apps
- Built a K-means clustering model to group 69,851 app updates of 2,232 apps into 6 patterns based on release note behavior (e.g., length, delta, and sentiment)
- In-submission EMSE journal paper as first author

Queen's University ECE Department

Kingston, ON

Software Engineering Researcher

May 2018 - May 2019

- o Investigated requirements engineering with Prof. Daniel Alencar da Costa and Prof. Ying Zou
- Applied 3 reinforcement learning techniques to model code repository behavior from 133 GitHub projects
- o Customized an NLP algorithm to establish links between test documentation and source code
- Accepted peer-reviewed conference paper at MSR 2019 as first author

Work Experience

AMD Markham, ON

Software Engineer (8-month internship)

Sept 2019 - Present

- o Developing GPU driver software on the Display Abstraction Layer team
- Specialized in 4K scaling options and High Dynamic Range Imaging (HDR) support
- Kernel mode debugging on Windows OS using WinDBG and C++

Queen's Technology and Media Association

Kingston, ON

Android Developer

Sept 2018 - May 2019

- Built an Android AR application that places rendered furniture in rooms
- \circ App (LucyAR) published on the Google Play Store on March 18^{th} 2019

GF Securities Guangzhou, China

Investment Banking Analyst (4-month internship)

Summer 2017

- Advised initial public offering (IPO) transitions for clients of the industrial group
- o Researched and audited client investments using various financial models

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%)

TEACHING EXPERIENCE

Queen's University Teaching Assistant

Kingston, ON Winter 2018

• Held weekly tutorials and proctored biweekly quizzes for *Data Structures and Algorithms*

• Held one-on-one tutorials and raised 3 students' averages by over 10%

Mount Royal University

Calgary, AB 2015 - 2016

Piano Instructor

• Employed by Dr. Peter Jancewicz to tutor 4 beginner level students for 2 summers

Hacks

• QHacks 2018: Jarvis Music - Web application for users to find a Youtube song by speaking lyrics. Process: Google Cloud speech to text API \rightarrow keywords extraction with Vector Space Model \rightarrow Semantics analysis with Doc2Vec \rightarrow Genius Lyrics API \rightarrow Youtube Data API

AWARDS

- SIGSOFT CAPS Student Travel Award for ICSE 2019
- 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)

Programming Skills

- Languages: Python, R, SQL, C/C++
- Technologies: Python PANDAS and Numpy, R dplyr and ggplot2, PostgreSQL, WinDBG debugging