

## EDUCATION

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- **Queen's University** Kingston, Ontario  
*Bachelor of Applied Science, Engineering and Mathematics Dual Degree* Expected graduation: 2021 June

## RESEARCH EXPERIENCE

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- **Carnegie Mellon University ISR** Pittsburgh, PA  
*Visiting Summer Researcher (REUSE)* Summer 2020
  - Building a program synthesis pipeline for API migration with **Ruben Martins** and **Claire Le Goues**
  - Using software fault injection to build a custom NLP tokenizer for API error messages
- **Queen's University CS** Kingston, ON  
*Undergraduate Researcher* May 2019 - May 2020
  - Investigated mobile development documentation with **Ying Zou** and **Ahmed E. Hassan**
  - Performed a novel empirical study on 69,851 releases and 67.7 million user reviews for 2,232 apps
  - Built unsupervised learning algorithms to group 69,851 app updates into 6 patterns based on release note behavior (e.g., length, delta, and text sentiment)
  - In-submission EMSE journal paper as first author
- **Queen's University ECE** Kingston, ON  
*Undergraduate Researcher* May 2018 - May 2019
  - Modeled the evolution of Behavior Driven Development with **Daniel Alencar da Costa** and **Ying Zou**
  - Applied 3 reinforcement learning techniques to model code repository behavior from 133 GitHub projects
  - Customized and trained a novel NLP algorithm to establish links between test documentation and source code
  - Accepted peer-reviewed conference paper at MSR-2019 as first author

## WORK EXPERIENCE

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- **AMD** Markham, ON  
*GPU Driver Software Engineer (8-month internship)* Sept 2019 - May 2020
  - Developed and debugged High Dynamic Range (HDR) and 4k-scaling features on prototype monitors
  - 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
  - App (LucyAR) published on the Google Play Store on March 18<sup>th</sup> 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
  - Researched and audited client investments using various financial models

## PUBLICATIONS

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- 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

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- **Queen's University** Kingston, ON  
*TA for Data Structures and Algorithms under Ying Zou* Winter 2018

## HACKS

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

## AWARDS

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- 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)
- 4th place Canadian Music Competition 2015 (national award)

## PROGRAMMING SKILLS

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