# **RYAN CHU**

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### **EDUCATION**

### Bachelor of Engineering Physics with Mechanical Specialization, B.A.Sc.

#### Queen's University

September 2017 – April 2022

Kingston, ON

- GPA of 3.63/4.30 with Dean's Scholar Honours in all years of study
- Minor in Commerce at The Smith School of Business
- Relevant Courses: Experimental Data Management | Automatic Controls | Computational Physics | Quantum Mechanics | Mathematical Methods | Accounting | Marketing | Finance | Economics

### **EXPERIENCE**

### **Technical Analyst**

#### Deloitte

May 2020 - Present

Waterloo, ON

- Professional Experience Year (PEY) between 3<sup>rd</sup> and 4<sup>th</sup> year of university
- Facilitated direct client contact and coordination of R&D investment incentives claim activities to strategically identify candidate projects to pursue. Applied engineering concepts to specific projects and communicated with client technical teams to understand their technology and financial documentation.
- Lead a data analytics project to identify areas for growth based on the technical data of ~100 previous engagements in the manufacturing and technology industries; to present metrics in an Excel dashboard to aid senior management in the design of strategic operational plans.
- Technologies: Excel | PowerPoint | Word | Project Management Tools

#### **Business Data Analyst**

### Allergan Pharmaceuticals

May 2019 – August 2019

Toronto, ON

- Introduced several data driven insights with a Python code to identify
  marketing KPIs and automate the analysis of updated physician and patient
  data which decreased the previous excel based analysis time by 40%.
- Built SQL scripts to wrangle data from a 200,000-patient database and organized unique data sets with corresponding documentation for a team of external consultants to utilize once the term was complete.
- Published and built 7 Power BI dashboards to model the business unit sales and outreach metrics. Accomplished by integrating live objects from Sales Force and presenting insights to build a product marketing strategy.
- Languages & Packages: SQL | Python | Pandas (pd) | Power BI | Excel

## **Program Developer**

#### The University of Toronto

April 2019 - August 2018

Toronto, ON

- Designed an educational program on mechanical and computer engineering to help elementary and high school students apply theory to actual applications.
- Presented 3 lessons a day to over 100 students and documented each lesson plan for other instructors to learn and teach physics, programming, and mathematics.
- Skills: Python | C | PowerPoint | Teaching | Public Speaking

#### **SKILLS**

### **Programming Languages**

Python I SQL I MATLAB I C I HTML

#### **Business**

Power BI | Tableau | Excel VBA | Adobe Analytics | Google Analytics | Notion | Slack | Technical Writing

#### **Engineering**

SolidWorks CAD | PSpice | LabView | Maple | Servo Motors | Circuit Design | Block & Process Flow Diagrams

### **PROJECTS**

### **Finance and Partnership Executive**

Queen's Leaders Engaging in Change

- Responsible for identifying companies which were suitable partnerships with the conference.
- Developed a financial budget to allocate over \$5,000 towards each team portfolio.

#### **Automated Mechanical Dropper**

Queen's AERO Design Team

- Designed the dropper in CAD and programmed electrical components using C to control servo motors and remote communication.
- Wrote testing software to validate the accuracy of the dropper onto given targets and asses the rigidity of the design.

#### **Rover Control and Simulation**

Queen's Software Engineering

- Programmed a control system that would drive a rover through 4 waypoints on a physical outdoor environment.
- Designed a MATLAB and State-Space Programming script to simulate the rover and test output accuracy based on steering angle results.

# **PUBLICATIONS**

"An Investigation of Striations
Occurring in Glow Discharge Plasma"

With the Department of Physics, Engineering Physics, and Astronomy at Queen's University, *Jan 2020*