# Isidor Kaplan

## **About Me**

Second-year computer engineering student at the University of Toronto with an interest in machine learning, programming, and software-design. On Dean's List for all academic terms to date. Recipient of University of Toronto In-Course Scholarship and FASE First Year Summer Fellowship. Worked for the iQua research group and co-authored three (3) research papers on Deep Reinforcement Learning.

## **Education**

Bachelor of Applied Science, Computer Engineering | University of Toronto

- 2019 Present Currently completing 2nd Year
- 4.0/4.0 cGPA Cumulative Grade Point Average (3 terms)

# **Experience**

Academic Researcher - Machine Learning | iQua Research Group

- Helped design and apply Deep Reinforcement Learning algorithms under the supervision of Prof. Baochun Li
- Dealt with a range of applications including congestion control, edge computing and network-adaptive coding.
- Designed large code-bases in Python with PyTorch to train and evaluate machine learning models

**Engineering Design Team** | Engineering Strategies and Practices II

- First student in history of the course (10+ years) to take initiative to locate an industry project and bring it to the course.
- Led an engineering team to come up with and implement a Machine-Learning based solution to autonomously identifying faulty power-line insulators from images.
- <a href="https://tinyurl.com/metscoinsulators">https://tinyurl.com/metscoinsulators</a>

# **Relevant Courses**

- Engineering Strategies and Practices I and II: Engineering design process. Worked with a client in industry to solve a real-world problem.
- Computer Fundamentals: Introduction to C programming
- **Digital Systems**: Digital Circuit Design. Lab focused. FPGA's and Verilog.
- Programming Fundamentals: C++, Data Structures, Complexity
- Calculus I, II, III: Single and multivariable calculus, vector calculus.
- Linear Algebra: Fundamentals of Linear Algebra
- Engineering Mathematics: Differential Equations, Complex Analysis
- Computer Organization (Enrolled): Assembly Programming
- Software Communication & Design (Enrolled): Team Design Project

#### Contact

- **416-917-9227**
- https://www.linkedin.com/in/isidorjkaplan
- https://github.com/isidorjkaplan
- ↑ 170 Robert St. Toronto ON M5S2K3

# **Technical Skills**

- C, C++, Python, Java
- Machine Learning
- PyTorch and Tensor-flow
- MATLAB
- Verilog
- Linux / Unix
- mySQL (Beginner)
- Microsoft Office

# **Interpersonal Skills**

- Leadership
- Initiative
- Project Management
- Communication
- Teamwork

#### **Awards**

Deans List (2019-Present)

· All academic terms to date

## Galaxy Explorer AI (Fall 2020)

• Top 5, course competition

# First Year Fellowship (2020)

 Awarded prestigious fellowship to sponsor first year research during the summer.

#### In-Course Scholarship (2020)

 Was awarded a prestigious in-course scholarship for academic performance during 2019-20 school year.

#### Reversi AI (Winter 2020)

• Top 5, course competition

#### **Board Proficiency** (2019)

Top grades in high school

#### **Waterloo Competitions**

Certificate of Distinction

- Canadian Computing Competition (2018,19)
- Euclid Math (2019)