





# Shadman Kaif

COMPUTER ENGINEERING  
STUDENT

## CONTACT

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## SKILLS

### Languages

C++ C Verilog JavaScript  
MatLab Assembly Python Turing

### Systems, Frameworks & Tools

Quartus ModelSim MultiSim  
Node.js Linux Mac OS Git  
Visual Studio Jupyter Notebook

## EDUCATION

### University of Toronto

BASc - Computer Engineering  
2<sup>nd</sup> Year  
Robotics & Mechatronics Minor  
2018 – 2022

## AWARDS

Edward S. Rogers Admission  
Scholarship (June 2018)

UofT Scholar's Award (February 2018)

International Baccalaureate Diploma  
(July 2018)

Core French Completion (June 2018)

## EXTRA-CURRICULARS

First Robotics Competition  
(September 2017 – April 2018)

Bendale Acres Long-Term Care Home  
Volunteer (May 2015 – January 2018)

Chess Team (September 2013 – June  
2018)

## INTERESTS

Video Game Design  
Data Analysis  
Web Development  
Music  
Sports

## WORK EXPERIENCE

### Sata Computers Inc.

May 2019 - August 2019

#### Technical Associate

- Identified customers' desired products and was able to sell the products accordingly
- Informed and educated the customers about business partners associated with the company such as ACN and Xoom Energy
- Removed malware** on desktops, installed Microsoft Office on computers, and replaced screens on computers
- Replaced toners on printers, and learned about various parts of computer hardware and software

### Bengali Information and Employment Services

June 2019 - August 2019

#### Community Development Assistant

- Created **online adverts** and assembled a team of twenty-three volunteers for fundraising
- Updated the organization's website frequently using **WordPress**
- Created and promoted flyers using **Adobe Photoshop** to promote the non-profit organization's events such as the annual general meeting and the job search and networking building workshop

### Art Gallery of Ontario

October 2016 - February 2017

#### Audio Guide Technician

- Distributed audio guide units, providing a brief "how-to", and assisting with their return, reuse and retrieval, maintaining an adequate stock to ensure smooth service
- Troubleshooting technical issues (malfunctions), to report to the Coordinator re: maintenance and repair
- Monitored inventory levels, and informed Coordinator when levels were unsatisfactory, as required

### Berry Road Food Co-op

January 2019 - April 2019

#### Design Team Member

- Worked alongside five other engineering students as part of the Engineering Strategies & Practices II project
- Given a client statement, the team created **Project Requirements** and **Conceptual Design Space** documents in which the client's problem was identified and three engineering solutions were pitched
- Presented the final three engineering students to the client, fellow engineering students and University of Toronto professors

## PROJECTS

### PYNQ Eye | Python (MakeUofT 2020 Winner)

February 2020

- Created a facial and optical recognition program using Python
- Used Xilinx's PYNQ-Z1 board for hardware acceleration and efficiency
- Trained Neural Network XML using image databases of human faces and eyes
- Executed the program on Jupyter Notebook, a modular run-time environment

### Hot Wheels Car Racing Game | Verilog HDL


October – November 2019

- Programmed a car racing game using Verilog HDL, VGA display, and Intel Altera's DE1-SOC board
- Made use of a PS/2 keyboard, finite state machines, and clocks and counters
- Used Quartus and Modelsim to troubleshoot and test Verilog code

### Asteroid List AI | C++

November 2019

- Created an AI for an asteroid shooting spaceship game provided by a professor at the University of Toronto
- The AI performed 6<sup>th</sup> best amongst 350 Electrical and Computer Engineering students in the class
- Used linked lists, object-oriented programming, and inheritance to create the AI

 Others: Tic-Tac-Toe, Music Library, Rocket Ship Simulation, Traffic Light Simulation, Binary Search Tree Domain Name Server