

# OMAR ABID

<https://www.linkedin.com/in/omarabid4/>, C: 647-909-5856 | [omarabid.moa@gmail.com](mailto:omarabid.moa@gmail.com)

## SUMMARY

I obtained my BSc degree in Biophysics and then went on to pursue a MSc in Computer Science specializing in Computer Vision. Through my training I've acquired knowledge and experience in the domains of machine learning, electronic circuit design and computational neuroscience. My passion for driving change in the healthcare and financial sector is complemented with my strong artificial intelligence background. My mission is to design and implement cutting edge technologies in these fields.

## SKILLS

### Programming

- **Strong:** C++, Java, Python, Android, OpenCV, OpenCL, Machine Learning (CNN, SVM)
- **Knowledgeable:** Node.js, SQL, PHP, Tensorflow

### Theoretical

- Quantum Physics, Electronics, Computational Neuroscience

### Interpersonal

- Team Leadership & Inclusivity, Work Ethic, Communication

## EDUCATION

2018

Master of Science: Computer Science  
York University — Toronto, ON, Canada  
*Area of Focus:* Active and Attentive Vision in Computational Neuroscience

2014

Bachelor of Science: H. Biophysics  
York University — Toronto, ON, Canada

2009

High School Diploma  
Emily Carr Secondary School — Vaughan, ON, Canada

## EXPERIENCE

05/2015 to 08/2015

Research Assistant  
York University — Toronto, ON  
*J. Tsotsos Vision Lab:* Addition of new features to TarzaNN - a neural network simulator. Implemented in C++.

10/2013 to 04/2014

Research Assistant  
York University — Toronto, ON  
*R. Lew's Electrophysiology Lab:* Design and development of an electronic circuit for current-voltage measurements of *Neurospora crassa* hyphae.

04/2013 to 08/2014

Research Assistant  
York University — Toronto, ON  
*T. Womelsdorf's Attention Learning Lab:* Statistical EEG Data analysis of Macaque Monkeys for neural population decoding. Analyzed with Matlab's Statistics and Machine Learning Toolbox.

## ACTIVITIES

### Activities

- *High Performance Computing Summer School - Waterloo, ON 2014:* OpenMPI and CUDA based course.
- *NextAI 2017:* Finalist for entrepreneurs creating AI powered business.

### Awards

- *Dean's Honor Roll 2011:* Academic Excellence in Biophysics
- Math Provincial Award

### Volunteer

- *EpilepsyToronto.org 2013:* Fundraising and educating.

## PUBLICATIONS

Sengupta, R., Abid, O., Bachoo, A., & Tsotsos, J. (2017). Attentional blink as a product of attentional control signals: A computational investigation. *Journal of Vision*, 17(10), 1197-1197.

## PREVIOUS EXPERIENCE

01/2016 to 04/2017

Teaching Assistant  
York University — Toronto, ON

Invigilate and grade exams and labs for first to third year undergraduate computer science students. Worked with robotics, mobile app development and software design.

10/2013 to 07/2014

Research Assistant

York University — Toronto, ON

*T. Womeldorf's Attention Learning Lab*: Collect and analyze data from human participants to assess the impact of different strategies for learning the relationship between stimulus and reward. Leveraged Matlab's Statistics and Machine Learning Toolbox.

09/2013 to 09/2015

Tutor

Tutor Doctor — Toronto, ON

Tutor high school and university students for a variety of subjects: Physics, Chemistry, Math, Computer Science

11/2012 to 04/2012

Software Developer Associate

York University — Toronto, ON

Design and implement software interface and communication systems for York University's Rover Team. Used C++ and Python.

09/2011 to 04/2013

PASS Leader

York University — Toronto, ON

*Group study session organizer and facilitator*: Prepare and facilitate study sessions for undergraduate students taking first and second year science courses: Chemistry, Math, Physics. Take part in hiring new employees.

05/2011 to 09/2011

West Nile Virus Control Technician

City of Toronto — Toronto, ON

09/2007 to 09/2008

Food Service Worker

McDonald's — Toronto, ON

Take customer orders, prepare food and manage stock inventory.