Kalli Bonin

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SKILLS

Always pushing to reach greater achievements and improve skills and knowledge. Flexible, organized, excellent multi-tasking and problem-solving skills, and a strong work ethic with the ability to thrive in a fast-paced deadline-oriented environment.

Robotics – Programming - Autonomous	Python / C++ / C / C# - Git / Github	Self Motivated
Solidworks - AutoCAD – Inventor	Matlab – Embedded Systems	Project Management
Problem Solving - Debugging	Innovative - Dynamic	Detailed Documentation
Machine Learning – Deep Learning – AI	US/Canada/Euro Passports	Teamwork – Collaborative

EDUCATION

University of Waterloo   2017 – 2022
Bachelor of Applied Science BASc - Mechatronics Engineering
Digital Computation, Linear Algebra, Algorithms and Data Structures, Ordinary Differential Equations, Microprocessors and Digital Logic, Experimental Measurements and Statistical Analysis

Coursera – Andrew Ng – Stanford University   2019
Deep Learning Specialization – *In Progress*
Deep Learning (Python/TensorFlow): Initialization, L2 and Dropout Regularization, Batch Normalization, Gradient Checking, Mini-Batch Gradient Descent, Momentum, RMSprop and Adam, Convolutional Networks - visual detection and recognition tasks, RNNs with variants

Coursera – Andrew Ng – Stanford University   2018
Machine Learning - License NQG4F42PBHBH
Machine Learning: Linear and Logistic Regression, Regularization, Neural Networks – Representation and Learning, Backpropagation, Support Vector Machines, Unsupervised Learning, Dimensionality Reduction, Anomaly Detection

WORK EXPERIENCE

Shoplogix - Division of Canada's largest and most successful tech company   09/18 – 12/18
Company combines powerful analytics and intuitive visual reporting to transform the way you see, analyze, and interpret data.
Junior Application Engineer
- Develop and execute sophisticated software tests increasing efficiency and screening for errors in functionality
- Assist in driving progress of company's new OKRs and develop goals for the new quarter
- Documentation of company's systems for internal and external training
- Develop Python script to scrape XML data from the company database increasing efficiency by 65%
- Created scripts to parse information and debug a problem faster by 25%
- Created VBA scripts on existing Export API to display information for customer
- Assisted in managing key account, driving the success of their Smart Factory
- Developed the Lego Mini Factory Project to showcase the company's product at Tradeshows

Evertz Microsystems, Burlington, ON   01/18 – 04/18
A worldwide leader in the design and manufacture of broadcast, film production equipment for the film and television broadcast industry.
Hardware Design Engineer
- Programmed FPGAs using VHDL to test design and functionality of PCB
- Completed engineering change orders, daily documentation, and test procedures
- PCB design, prototyping, and debugging
- Analytically created testing protocol to validate prototyped boards

E-bots Robotics, Oakville, ON   2012 – 2017
Enhanced learning facility dedicated to engaging children in the world of programming, designing and building robots.
Programming / Project Design Instructor
- LEGO NXT-G programming – developed logical thought process for state machines, loops, and functions
- Encouraged critical thinking, problem solving, and project design in students
- Teaching students ages 7 to 14 years

Stand Up and Speak, Mississauga, ON   2013 – 2017
Specializes in teaching effective communication skills to students of all ages across North America.
Public Speaking Instructor
- Taught interactive speaking curriculum
- Prepared and enhanced speeches with body language, vocal variety and messages
- **Teaching students** ages 6 to 16 years

Xerox Research Center of Canada, Mississauga, ON   2015
3D Printing Intern / Lab Assistant
- Executed experiments with 3D printing materials testing its functional parameters
- Compiled analytical lab reports including an experimental procedure and analysis

PROJECTS and ACCOMPLISHMENTS

UW React   2019 - Present
- in 6 months create the best fully autonomous FRC robot to compete against teleoperated robots in a match
- Mechanical Lead working with a group of motivated students to design and manufacture an industrial sized robot
- Member of the Path Planning Team applying fundamental knowledge of machine learning in a real-life application

WATonomous AutoDrive Team   2017 - 2018
- UWaterloo student design team for creating a self driving car from scratch in three years
- Responsibility was to understand the physics behind a moving car and how its surroundings affected its movement
- SAE Autodrive Challenge

Captain and Lead Builder – Team 5225A – The Pilons   2011 – 2017
- FLL Lego League (2011 – 2014) and VEX Robotics (2013 - 2017) - Starstruck, Skyrise, Toss Up, Nothing but Net
- World / Provincial / Regional Winners and Competitors
- Both venues competing on a world class stage against 20k - 40 k teams globally
- Autonomous and teleoperated robotics included design, build and program one robot with different challenges yearly
- 2017 – 5th Place World Skills VEX Robotics Champions – 9th Place Robot Performance
- 2016 –3rd Place World Skills VEX Champions
- 2014 – 4th Place World Champions VEX Robotics – 1st Place Robot Performance – Inventors Appreciation

Public Speaking Maven   2005 – 2017
- Performed both memorized and impromptu speeches
- Provincial – Regional placements every year
- 100s of competitions

Black Belt Shotokan Karate Sensei   2003 – 2017
- Achieved blackbelt in Shotokan Karate in 2011
- Obtained green belt in Brazilian Jiu Jitsu in 2015
- Instructor of Shotokan through all ranks to Black Belt candidates teaching katas through repetition