

# Dylan Ashley

10720 - 84 AVE NW, UNIT 103, Edmonton AB T6E 2H9, Canada

☎ (780) 554-4425 | ✉ dylanashley@dylanashley.io | 🏠 www.dylanashley.io

## Education

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### University of Alberta

*Edmonton, Alberta, Canada*

BACHELOR OF SCIENCE HONORS IN COMPUTING SCIENCE (3.7 / 4.0 CUMULATIVE GPA, 4.0 / 4.0 MAJOR GPA)

*Sep. 2013 - Jun. 2017*

- Transferred from Keyano College (Fort McMurray, Alberta, Canada) in 2013.
- Won the Kao Family Eisenco Scholarship in 2016 (one available).
- Studied artificial intelligence topics such as machine learning, reinforcement learning, and pathfinding.
- Primarily worked with Python, C, C++, Java, MATLAB, Shell, and  $\LaTeX$ .
- Selected work in Assembly, Lisp, Prolog, and SQL.

## Experience

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### Reinforcement Learning and Artificial Intelligence Laboratory

*University of Alberta*

NSERC UNDERGRADUATE STUDENT RESEARCH AWARD (SUPERVISED BY PROF. RICHARD STUART SUTTON)

*May 2016 - Aug. 2016*

- Used the iRobot Create platform to build a concrete implementation of general value functions as predictors.
- Analyzed the overfitting behavior of random state representations in reinforcement learning.
- Experimented with a new method of learning the variance of states in reinforcement learning.
- Primarily worked with Python and C.

### University of Alberta, Department of Computing Science

*University of Alberta*

TEACHER'S ASSISTANT

*Sep. 2015 - Dec. 2015*

- Teacher's Assistant for introduction to file and database management course.
- Was responsible for running a weekly lab (18 students; 11 sessions), creating lab exams, and marking student assignments/projects.

### Software Systems Laboratory

*University of Alberta*

NSERC UNDERGRADUATE STUDENT RESEARCH AWARD (SUPERVISED BY PROF. JOSÉ NELSON AMARAL)

*May 2015 - Aug. 2015*

- Worked with the Standard Performance Evaluation Corporation on their upcoming CPU benchmark suite.
- Performed low-level analysis of the behaviors of benchmarks under different workloads.
- Created new workloads so that the full range of typical behaviours for the benchmarks are available.
- Created a set of tools to perform microarchitecture-independent workload characterization.
- Presented "An Evaluation of Methodologies for Comparing Performance Evaluation Benchmark Workloads" at the University of Alberta's Summer Research Poster Session.
- Primarily worked with Python, C, and  $\LaTeX$ .

## Additional Activities

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### Octopusapp Inc. and the University of Alberta

*Edmonton, Alberta, Canada*

PREDICTING CUSTOMER CHURN

*Oct. 2016 - Dec. 2016*

- Worked with Octopusapp Inc. on their Jobber product.
- Applied machine learning to predict if, given the account activity of the user, a failed billing on a user's credit card was due to customer churn or a billing error.
- Algorithms used included Support Vector Machines, Artificial Neural Networks, Decision Tree, Random Forests, Extreme Gradient Boosting, and Decision Stumps.

### Academic Council

*Keyano College*

SECRETARY

*Sep. 2012 - Apr. 2013*

- Represented the student body in choices regarding the academics of the college.
- Served as secretary; the only executive position held by a student.

### Student's Association of Keyano College

*Keyano College*

GENERAL COUNCIL MEMBER

*Sep. 2011 - Apr. 2013*

- Served as a representative of the academic upgrading program and as a representative on the college's academic council.
- Awarded the Keyano College Gold Award for excellence in student leadership.