

Andrew Jemin Choi

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Education

University of Toronto

B.A.Sc. IN COMPUTER ENGINEERING

CGPA: 3.72 / 4.0

Toronto, ON

Spring 2019 (expected)

Experience

Amazon (AWS)

Seattle, WA

SOFTWARE DEVELOPMENT ENGINEER INTERN

Summer 2018

- Worked on the AWS Internet of Things (IoT) team to streamline the on-boarding process for things and devices
- Created an open source one-button script to automatically connect Raspberry Pi's to AWS IoT using the AWS Python SDK and AWS IoT SDK, reducing user on-boarding wait times by 60%
- Developed an Android App in Java that was used as a reference model for customers to show how to authenticate and authorize Android devices using Amazon Cognito, AWS IAM, and the AWS Mobile SDK

University of California, Los Angeles (UCLA)

Los Angeles, CA

RESEARCH STUDENT, STARAI LAB

Summer 2017

- Explored topics in artificial intelligence and researched new ways to perform faster inference on Bayesian Networks by optimizing graph structures
- Developed a Python/C tool that was 8 times faster than the state-of-the-art algorithm in finding marginal probabilities by compiling and optimizing feed-forward arithmetic circuits
- Research Paper published in the 2017-2018 issue of RUCS, under the supervision of Dr. Guy Van den Broeck

University of Toronto

Toronto, ON

TEACHING ASSISTANT, INTRODUCTION TO ENGINEERING

Fall 2016, Fall 2018

- Led weekly tutorials to teach about computer engineering, career development, and engineering problem solving
- Received an "Outstanding" TA rating from a class of 25 students, with an average rating of: 6.87/7

Safran

Peterborough, ON

SOFTWARE ENGINEERING INTERN

Summer 2016

- Designed and documented architecture diagrams for ~1000 functions for embedded libraries written in C and Assembly
- Developed a Python program to efficiently parse aviation requirements and cross-check data flow in the code, reducing documentation errors by ~50%
- Received the NSERC Experience Award, valued at \$5625, for undertaking an industrial software engineering research project

Projects

Recordr.ai: Face-tracking Video Recorder

PYTHON

- Created an automated video recorder to capture lecture recordings on a smartphone, supervised by Prof. Jason Anderson
- Integrated FaceNet and PoseNet on Tensorflow to recognize users' faces and detect gestures real-time in a classroom
- Used AWS Kinesis for mobile video streaming and AWS IoT to communicate between a smartphone motor and an EC2 instance running Convolutional neural networks (CNN)

Mapping the City of Toronto

C++

- Led a team of 3 in developing a C++ mapping program on Linux using OpenStreetMap APIs
- Used unit testing and profiling for ~10000 lines of code to isolate bugs and pinpoint performance issues
- Created interactive and responsive graphics for the mapping interface and applied heuristics to optimize graph algorithms and to approximate Travelling Salesman solutions (~50% faster than expected metrics)