

# Nicholas Leung

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## Technical Skills

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### Languages

C++ · C · Objective-C · Python · Java · JavaScript · SQL

### Tools & Frameworks

Bash · Git · Docker · Node.js · React · React Native · PyTorch

## Professional Experience

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### ASML

Jun 2021 – Aug 2023

Software Design Engineer · Wilton, CT

- Developed driver middleware for the next-generation EUV reticle stage assembly
- Improved a diagnostic application for low-level subsystem control to support cross-team integration efforts
- Increased test coverage and code cleanliness to resolve 1000+ legacy software quality violations

### NETINT Technologies

May 2019 – Aug 2020

Test Engineer · Markham, ON

- Extended the internal test suite to include new features of the hardware video transcoder and prevent regression errors
- Created a CLI utility to perform parallel firmware upgrades, reducing customer installation times by over 50%

### ASML

Jun 2018 – Jul 2018

Software Engineer · Wilton, CT

- Developed a preprocessing tool that determines minimal build-scopes for faster compilation
- Optimized graph generation by constructing a static lookup table of binary-level dependencies

## Education

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### University of Toronto

Sep 2016 – Apr 2021

B.A.Sc. Electrical & Computer Engineering with *Honours* · Toronto, ON

## Projects

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### Soundboard

2023

- Created an iOS application using UIKit that conveniently records and replays short sound bites
- Conducted alpha and beta testing via TestFlight before launching on the App Store

### SpeechBubble

2020 – 2021

- Developed a mobile application that isolates audio of interest in a noisy environment (cocktail party effect)
- Architected the backend infrastructure using Express.js and Node.js to service client requests and manage user data
- Received *Certificate of Distinction* and *2021 Administrators Award*

### Cloud Storage Service

2021

- Designed a distributed NoSQL database that provides replication and a notification system

### Automated CAPTCHA Solver

2021

- Built a deep learning model that uses image segmentation and optical character recognition to bypass CAPTCHA tests

## Certifications

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AWS Certified Cloud Practitioner

2022

IEEE Hardware Certification

2019