

December 04, 2017

Google  
2400 Bayshore Parkway  
Mountain View, CA 94043

Dear Hiring Manager:

Re: Application to Software Engineer, University Graduate

I believe with my adaptability and experience developing web and networked systems in Golang and Python would be able to be a productive member of your company.

During my studies in school, I have learned and developed a great deal of applications and programs involving backend and distributed online systems. On one occasion I created a multi-node key value service in Golang to handle several users and the concurrent processes and consistency across the nodes.

After creating a Python web application for a online community I am in, I gained confidence in my ability to truly analyze code, test the requirements were met, and implement and debug them as issues happened. In my time developing HipHopHeads Polls I have come across multiple different issues such as API handling, form-processing, and user validation and all of them turned into learning experiences.

Along with my coding skills, I believe I am an effective communicator, shown by time spent working at Microsoft. At Microsoft I was placed on a team where my work was full stack both in technology and as an employee of the company. I was tasked with professional communication and documentation both for the company internally and external outside readers.

I am grateful for this chance and to further share how my other experiences would make me a great candidate for this position. Thank you for you time and consideration. I look forward to hearing from you.

Sincerely,  
Nicholas Rutigliano

# NICK RUTIGLIANO

✉ rutigliano.nick@gmail.com 🌐 rutigs.github.io

in nick-rutigliano 📺 rutigs

## SKILLS

**PROGRAMMING:** Go, Python, C, C#, Java, C++, Erlang\*

**TOOLS/Frameworks:** Git, .NET, Django

**OTHER:** Linux, Bash, SQL

## EDUCATION

**University of British Columbia**

Bachelor of Science Computer Science

June 2018

## EMPLOYMENT

**Microsoft**

Software Engineer Intern

Jan 2016 to Aug 2016

- Helped fix issues with the distributed content service and service bus that handles the data generation for the four client applications that need it.
- Contributed in maintaining, deploying, and configuring several cloud services.
- Maintained in-house tooling for logging management and configuration encryption/decryption.
- Worked on accessibility features including UI metadata, navigation and narrator on a Universal Windows Application to meet the Microsoft Accessibility Standards.
- Developed a time shifting testing tool to help ease testing application state and state transitioning as well as time gated user features.

## PROJECTS

**Distributed Key Value Store**

Apr 2017

- Designed and developed 2 versions of a multi-node key value store written in Go required to provide the Atomicity, Consistency, and Independence in ACID.
- Planned and created the first version to use strict two phase committing to meet the ACI constraints.
- Created a second version using blockchain technology via proof of work SHA256 hashing to integrate transactions into the store.

**SkrRTOS**

Dec 2016

- Built a Minix-style operating system kernel in C.
- Added various features including memory management, process multitasking and scheduling, signals, and device drivers.

**Berkeley**

Aug 2016

- Made an implementation of the Berkeley algorithm for clock synchronization in distributed systems.
- Built the project in Go using communication over UDP for both master and slave.

**Netcat**

Nov 2015

- Recreated the Unix networking tool for testing network connections over TCP.
- Implemented the application in C in 2 ways: one using traditional posix threads and another using the poll() system call to manage socket file descriptors.
- Added a new option for the server mode to allow multiplexing up to 10 connections.

**Dns Resolver**

Oct 2015

- Created a DNS resolver in Java for resolving domains to IP addresses.
- Followed the IETF RFC 1035 protocol for handling queries and responses.

**HipHopHeads Polls**

Aug 2015

- Designed and implemented a polling application for the community at reddit.com/r/hiphopheads with thousands of subscribers.
- Developed the service in python/django along with postgresql, css, js, bootstrap, and jquery.
- Provided a mobile friendly platform by designing for mobile first, optimizing images, using available CDN's, and only loading iframes on user clicks.

## VOLUNTEERING

**UBC Computer Science Student Society**

Sep 2015 to Current

- Helped manage logistics, supplies and events for Computer Science students.

**Nick Rutigliano**

**125 Milross Avenue**

**Vancouver, BC V6A 0A1**

**December 8, 2017**

**Chris Chenery**

**Software Engineer II, Microsoft**

**725 Granville St**

**Vancouver, BC V7Y 1G5**

Dear Chris,

I hope your current project is going well and free of bugs. I would like to use you as a reference for a job application and I am writing to ask for your permission. I am applying for a Software Engineering position at Google.

Having worked alongside you at Microsoft, you have seen my skills. As a co-worker and mentor, you watched and helped me improve over several months to improve both my technical abilities as well as team work and professional skills. I believe you are an excellent reference as you have great qualifications with your experience as well as a quality perspective on what I can bring to a team and a company.

Feel free to email me at [rutigliano.nick@gmail.com](mailto:rutigliano.nick@gmail.com) should you have any questions or concerns about this request. Thank you for your time and consideration.

Sincerely,

Nick Rutigliano

**Nick Rutigliano**

**125 Milross Avenue**

**Vancouver, BC V6A 0A1**

**December 8, 2017**

**David Lin**

**Program Manager, Microsoft**

**725 Granville St**

**Vancouver, BC V7Y 1G5**

Dear David,

I hope your current project is going well and is on schedule. I would like to use you as a reference for a job application and I am writing to ask for your permission. I am applying for a Software Engineering position at Google.

Having worked for you at Microsoft, you have seen my skills. As an engineer on your team, you have seen my skills in both developing quality software in a timely manner. I believe you are an excellent reference with your experience as both a project and program manager with firsthand perspective on what I can bring to a team and a company.

Feel free to email me at [rutigliano.nick@gmail.com](mailto:rutigliano.nick@gmail.com) should you have any questions or concerns about this request. Thank you for your time and consideration.

Sincerely,

Nick Rutigliano