

# NABIL BARAKATI

Student ID# 20616286

<http://nabil.xyz>

4A Honours Computer Science | Business Option

University of Waterloo | Expected Graduation: April 2020

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## SKILLS SUMMARY

- Excellent software design knowledge of web-based systems
- Critical and analytical thinker with exceptional attention to detail
- Extremely efficient self learner with a passion for new technologies

## EDUCATION

University of Waterloo, Waterloo, ON Sept 2015 - Present

*Candidate for Honours Bachelor of Computer Science - Business Option*

Relevant Course Experience:

- Strong understanding of effective and efficient algorithm design paradigms
- Experienced with database management systems and design methodologies
- Obtained fundamental knowledge of network architectures and protocols
- Functional understanding in building resilient, secure and scalable systems

## WORK EXPERIENCE

Lifion, New York City, New York Jan - May 2019

*Infrastructure Engineer - Platform Team*

- Led the organizational shift to Canary Deployments through Kubernetes and Envoy
- Reduced operational cost by \$500k yearly (AWS resources, monitoring and engineering costs) by upgrading staging environment to use Canary Deployment
- Enabled engineering teams to rapidly prototype new features by establishing self-service pipeline parallelizing deployment of both production and canary services

Athos, Redwood City, California May - Aug 2018

*Software Engineer - Data Processing*

- Developed network authentication web app for Athos Athlete Hub device which improved connection success rate by 30% and also greatly improved UI/UX
- Significantly enhanced security by developing a new access control layer restricting access to facilities' networks; preventing unauthorized access to restricted APIs
- Created granular logging system greatly increasing monitoring capabilities
- Reduced new client onboarding engineering hours by 90% through designing and implementing a pipeline involving several SQL scripts

TribalScale, Toronto, Ontario Sept - Dec 2017

*Agile Software Engineer - Web & Voice*

- Architected distributed cache that decreased load times by 5x for [airmillesshops.ca](http://airmillesshops.ca)
- Worked directly with Google while developing NBA Trivia for the *Google Home*
- Teamed up with AWS to enhance the integration between Amazon Pay and Voice to launch 1800-Flowers as one of the first voice apps to integrate with Amazon Pay
- Represented TribalScale as the "Voice Expert" to close a deal with RBC

Capital One, North York, Ontario Jan - April 2017

*Software Engineer - Web & Infrastructure*

- Architected web platform infrastructure, serving over 1.5M users monthly
- Developed fully automated CI/CD pipeline. Included features such as rolling-back, archiving, cross-region replication & infrastructure initialization
- Successfully cut down production deployment times by 95% using AWS/Jenkins

Ontario Medical Association, Toronto, Ontario May - Aug 2015

*Front End Developer - High Velocity Team*

- Halved the dev time for SPAs by developing a library based upon the MVC pattern
- Designed and implemented multiple asynchronous web apps with adaptive UI

## LANGUAGE EXPERIENCE:

C, C++, Java, Python, SQL, Node JS, Angular, Terraform, Shell Scripting, GraphQL

## TOOLS/Frameworks:

AWS, GCP, Kubernetes, Git, Jenkins, Docker, Ambassador, Envoy, Istio

## HIGHLIGHTS:

Web Development  
Automation  
Project Management  
Infrastructure  
Distributed Systems  
Networks  
Security

## SIDE PROJECTS:

### Reachr

Activity based social-network which allows students with busy schedules to easily coordinate meetups.  
Developed business plan & website

### Code Name Envio

A web and mobile application used for crowdsourcing data. Designed to allow users to report issues within their vicinity with the option of upvoting events of concern.

### Visual Diff

An open source tool that allows for visual testing. Determines the amount of change that took place and passes or fails automated tests accordingly. Integrated into Capital One's release pipeline.  
Say goodbye to production defects!

### Rezoom - (Planning Phase)

A contextual vocal search engine. Vocally describe a position in some media (movie, book, tv show) and the system will automatically resume from their described "scene".

## Interests:

Machine Learning | Big Data | Cybersecurity | Web Design | Fitness | Video Games | Biology