

# Nishant Uniyal

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## EDUCATION

### UNIVERSITY OF BRITISH COLUMBIA

#### MASc ELECTRICAL & COMPUTER ENGINEERING

Aug 2014 | Vancouver, BC

Cum. GPA: 4.30 / 4.33

Emphasis in Machine Learning,  
Medical Image Processing, and  
Signal Processing

### MISSOURI UNIVERSITY OF SCIENCE & TECHNOLOGY

#### BSc IN ELECTRICAL & COMPUTER ENGINEERING

May 2012 | Rolla, MO

Cum. GPA: 3.67 / 4.0

Graduated summa cum laude

## TECHNICAL SKILLS

### PROGRAMMING

Experienced:

Python

Intermediate:

C++ • C

Beginner:

SQL • R • HTML • Ruby • Bash

• MATLAB

### LIBRARIES AND PACKAGES

Scikit-learn • Keras • Tensorflow

• Hyperopt • NumPy • Scipy • Pandas

• NLTK • Spacy • Plotly • Superset

• Pytest • OpenCV

### TOOLS

Proficient:

Docker • Jupyter • Airflow • Git •

Terminal • Pipenv • VS Code • Sublime

Text • PyCharm • SQL Operations Studio

•  $\text{\LaTeX}$

Learning:

Deep Learning • Data Science

Infrastructure • Kubernetes • AWS •

MongoDB • Django

### OPERATING SYSTEMS

MacOS • Linux • Windows

## LINKS

Website:// [Nishant Uniyal](#)

Github:// [nishantuniyal](#)

LinkedIn:// [nishantuniyal](#)

Google Scholar:// [Nishant Uniyal](#)

## EXPERIENCE

### BOEING VANCOUVER | DATA SCIENTIST

Nov 2017 – Present | Vancouver, BC

- Built a fully automated data engineering pipeline to ingest and warehouse the data in a programmatic way.
- Developed NLP methods for text classification using classical machine learning and deep-learning methods.

### CLARIUS MOBILE HEALTH | RESEARCH SCIENTIST

May 2015 – Nov 2017 | Burnaby, BC

- Invented novel ultrasound imaging methods and developed imaging algorithms (listed inventor on 3 issued and another 3 filed patents).
- Developed various automated algorithms from inception to deployment, which are currently offered to customers as premium product features.

### NZ TECHNOLOGIES | SOFTWARE DESIGN ENGINEER

Sep 2014 – May 2015 | Vancouver, BC

- Improved the gesture recognition and control system from 18 FPS to 30 FPS by integrating a new 3D infrared camera.
- Developed a real-time algorithm for perspective image correction using a projector-camera system.

### PHILIPS RESEARCH | RESEARCH COLLABORATOR

Sep 2013 – Jan 2014 | Braircliff Manor, NY

- Developed a machine learning package for data analysis and tissue classification which resulted in a publication.

### UNIVERSITY OF BRITISH COLUMBIA | GRADUATE RESEARCH ASSISTANT

Sep 2012 – Aug 2014 | Vancouver, BC

- Proposed and developed an innovative semi-supervised machine learning technique. (Best paper award)
- Developed a machine learning, signal processing, and image processing package which successfully detected breast and prostate cancer using ultrasound data.

## PATENTS

- Uniyal, N et al. "Systems and Methods for Identifying an Imaged Needle in an Ultrasound Image." 16 Oct. 2018.
- Uniyal, N et al. "Methods and apparatus for performing multiple modes of ultrasound imaging using a single ultrasound transducer." 29 Jan. 2019.
- Uniyal, N et al. "Ultrasound systems and methods for optimizing multiple imaging parameters using a single user interface control." 4 Dec. 2018.

## PUBLICATIONS

- Uniyal, N et al. "Ultrasound RF time series for classification of breast lesions." Medical Imaging, IEEE Transactions on, vol.PP, no.99, pp.1,1.
- Uniyal, N et al. "Ultrasound-based prediction of prostate cancer in MRI-guided biopsy." MICCAI CLIP, 2014. 142-150. [Best paper award, Presentation]

## ACTIVITIES

- Secretary of ECE Graduate Student Association (ECEGSA) 2013-2014.
- Winner of the Three Minute Thesis (3MT) Department Heat, 2014 UBC.