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 • MATLAB • C++ • C
Familiar:
R • HTML • Ruby • Bash

LIBRARIES AND PACKAGES
OpenCV • Scikit-learn • Hyperopt • NumPy • Scipy • Pandas • NLTK • Plotly • Superset

MATLAB TOOLBOXES
Image Processing • Statistics • Bioinformatics • Signal Processing

TOOLS
Proficient:
Docker • Airflow • Git • 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 science pipeline.

CLARIUS MOBILE HEALTH | Research Scientist
May 2015 – Nov 2017 | Burnaby, BC
- Invented novel ultrasound imaging methods and developed imaging algorithms (listed inventor on 6 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.
- Developed MATLAB scripts for ultrasound data processing and successfully used the data for prostate tissue classification.

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.
- Completed feasibility studies on ultrasound based methods for breast and prostate cancer diagnosis which resulted in three publications.
- Performed experiments to substantiate the ultrasound RF time series hypothesis.

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 Electrical and Computer Engineering Graduate Student Association (ECEGSA) 2013-2014.
- Winner of the Three Minute Thesis (3MT) Department Heat, 2014 University of British Columbia.