Leo (Phuc) Nguyen

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COURSEWORK

Brain Computer Interface
Data Science for Biomedical Informatics

Biomedical Imaging Analysis Theoretical Neuroscience Numerical Methods

SKILLS

PROGRAMMING

Python • R • Java • BASH • JavaScript • Matlab • LaTeX

TOOLS AWS • Django • MySQL • Jupyter/IPython • conda (scikit-learn, numpy, scipy, pandas, gensim) • git • d3.js/dc.js/jquery • MS Office

Machine Learning:

regression • svm • random forests • neural networks • naive bayes • feature engineering • clustering

Statistical and Digital Signal Processing:

time series • regression models • principal component analysis and dimensionality reduction • signal processing of neurophysiology data • neuroimaging analysis

SUMMARY

High-performing, adaptable data scientist with a passion for uncovering impactful information from unstructured data. Experience in results-oriented academic research projects in neuroscience and imaging. Proficient in big data, machine learning, statistics. Well-versed in Java, Python, Matlab and R. Result-driven team player with attention to details.

EDUCATION

UNIVERSITY OF PENNSYLVANIA

M.S.E IN BIOENGINEERING

Expected May 2016 | Philadelphia, PA

HAWAI'I PACIFIC UNIVERSITY

BS IN APPLIED MATH AND BIOCHEMISTRY

August 2013 | Honolulu, HI President's Scholarship Recipient

RESEARCH

LITT LAB - TRANSLATIONAL NEUROENGINEERING | MASTERS

STUDENT

April 2014 - Present | Philadelphia, PA

EEG Projects

- Prototyping burst-suppresion detection algorithm with EEG from ICU Patients
- Power spectral analysis of EEG in Parkinson's Disease Patients
- Classification of REM sleep behavioral disorder in Parkinson's Disease Patients

MRI Imaging Projects

- Validation and optimization of Multiple-Sclerosis progression prediction using contrast-free MRI and weighted-logistic regression
- Utilized advanced diffeomorphic registration methods using 3rd party python tools (NiBabel, NiPype, ANTs)

HPU ORGANIC SYNTHESIS LAB | RESEARCH ASSISTANT

August 2012 - August 2014 | Kaneohe, HI

• Improved Synthesis of and Nucleophilic Addition to 2-Formyl2cyclohexenone. Submitted and accepted publication. (doi:10.1016/j.tetlet.2014.11.100)