Keanu Nichols

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EDUCATION

The University of the West Indies — Trinidad
Bachelor of Science in Computer Science Special — *Aug. 2017 – Present*
Degree GPA: 4.03/4.3

PUBLICATIONS

- Hosein P., Rahaman I., **Nichols K.**, Maharaj K., Recommendations for Long-Term Profit Optimization, 1st Workshop on the Impact of Recommender Systems - Denmark *(ACM RecSys 2019 - **Best Paper**)*

EXPERIENCE

Machine Learning Undergraduate Researcher — April 2018 – Present
TTLAB — *Trinidad*

- Working on a National Geographic grant using UAV's to monitor crop health and weed detection
- Developed a recommender system using Multinomial Naive Bayes that showcased a profit/probabilistic trade-off for its recommendations.

Deep Learning Research Intern — June - August 2019
NASA Ames Research Center — *Mountain View, CA*

- Developed a binary classification model using Convolutional Neural Networks (CNN) trained on a dataset of tsunami affected buildings.
- Developed an image segmentation model to classify Landsat images of size 7601x7761 as having either clouds or not using Convolutional Neural Networks using Tensorflow/Keras Dataset API.

Software Engineer — May - August 2018
Community Health Analytics Open Source Software — *Remote*

- Used Natural Language Toolkit (NLTK) to conduct sentiment analysis by retrieving emails using Perceval from Open Source organization's mailing lists to determine differing levels of toxic emails.
- Designed and implemented a SQL database to store the emails for automatic retrieval for comparison.

RESEARCH GRANTS

- **National Geographic/Microsoft/NVIDIA** (AI For Earth): Farming Adaptation Artificial Intelligence for Resilience (FAAIR), 2021, **$70,800 USD**

TECHNICAL SKILLS

Languages: Java, Python, C/C++, SQL , JavaScript, HTML/CSS
Developer Tools: Git, Vim, LaTeX

REFERENCES

- Research Mentor: **Patrick Hosein**, Professor Computer Science, The University of the West Indies.
  - patrick.hosein@sta.uwi.edu
- Supervisor: **Brian Coltin**, Computer Scienctist, NASA Ames Research Center
  - brian.coltin@nasa.gov
- Supervisor: **Michael Furlong**, Computer Scientist, NASA Ames Research Center
  - padraig.m.furlong@nasa.gov