

Keanu Nichols

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EDUCATION

The University of the West Indies

Bachelor of Science in Computer Science Special

Degree GPA: 4.03/4.3

Trinidad

Aug. 2017 – Present

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

TTLAB

April 2018 – Present

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

NASA Ames Research Center

June - August 2019

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

Community Health Analytics Open Source Software

May - August 2018

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 (AI For Earth):** Farming Adaptation Artificial Intelligence for Resilience (FAAIR), 2021, **\$60,800 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 Scientist, NASA Ames Research Center
 - brian.coltin@nasa.gov
- Supervisor: **Michael Furlong**, Computer Scientist, NASA Ames Research Center
 - padraig.m.furlong@nasa.gov