AVISHA DAS

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Skills Summary

Technical Skills:

- **Languages**: Python, R, Matlab, C/C++, Java, C#, Ruby
- **Libraries and Software**:
    - Data Mining: Weka, NLTK, ScikitLearn, Pandas, Numpy, Scipy
    - Deep Learning: Keras, Tensorflow, PyTorch
    - Other: AWS, Microsoft Azure, Docker, SQL, MongoDB, Microsoft Visual Studio, Microsoft VS Code
- **OS**: Linux, Mac OSX, Windows

Education

University of Houston
Ph.D. in Computer Science, August 2014 - May 2020 (expected)

- **Current GPA**: 3.6/4.0
- **Relevant coursework**: Machine Learning, Data Mining, Advanced Numerical Analysis, Security Analytics, NLP and Advanced NLP, Statistical Methods in Research
- **Research Interests**: Data Analytics, Information Retrieval, Machine Learning, NLP, Deep Learning, Language generation

West Bengal Uni. of Tech.
B.Tech in Electronics & Communication Engineering, August 2010 – June 2014

- **GPA**: 9.18 / 10.0

Experience

University of Houston, Houston, TX

Graduate Assistant, August 2014 – Present

- **Project**: Building and modeling deep neural learners for automated email generation and analyzing performance and feasibility as a proactive security research problem.

- **Courses as TA**: Data Structures & Algorithms, Software Engineering & Design, Security Analytics, Computer Organization & Architecture, Machine Learning

Anadarko Petroleum Corporation (now Oxy), The Woodlands, TX

Data Science Intern at Advanced Analytics and Emerging Tech, May 2019 – August 2019

- **Project**: Leveraging natural language processing techniques for building a virtual assistant for digital operations and field development in the form a humanlike conversational agent.
- **Software/Tools used**: Python (Pandas, SlackClient, NLTK, Spacy, Matplotlib, Seaborn), SQL, IBM Watson, Slack API, Tensorflow, Keras, Docker, Gitlab

Halliburton Energy Services, Houston, TX

Summer Research Intern, June 2018 – August 2018

- **Project**: Predictive modeling for automated detection of tool failure and system maintenance in a timely manner.
- **Software/Tools used**: C#, Python (ScikitLearn, Pandas, Scipy, Numpy, Matplotlib, Seaborn), SQLite

2H Offshore Inc., Houston, TX

Data Science Intern, June 2017 – August 2017

- **Project**: Predictive analytics using ANN time series-based model for fast, reliable and effective Fatigue Damage Estimation in Offshore Drilling Riser Technology.
- **Software/Tools used**: MATLAB, MS Excel, Python (ScikitLearn, Pandas, Numpy)

Publications

- Modeling Coherency in Generated Emails by Leveraging Deep Neural Learners, *Computación y Sistemas (CyS) Journal* [To appear]
- SoK: Reexamining Phishing and Spear Phishing Detection Research from the Security Perspective, *IEEE Surveys and Tutorials Journal 2019* [Under review]
- Automated Email Generation for Targeted Attacks using Natural Language, *TA-COS at LREC-2018*
- Identifying Reference Spans, Discourse Facets and Summarizing: Experiments with Language Models, Transfer Learning and Entailment, *Scientometrics Journal, IR-2018*
- University of Houston @ CL-SciSumm 2017: Positional language Models, Structural Correspondence Learning and Textual Entailment, *BIRNDL at SIGIR-2017 (Shared Task)*
- What's In an Address: Fast Feature Extraction and Detection of Malicious URLS, *IWSPA at CODASPY-2017*

Awards and Acknowledgements

Scholarships

- Graduate Tuition Fellowship, University of Houston, Fall 2014 – Present
- Merit-based Scholarship for Undergraduate Education, Ministry of Human Resources-India, 2010 -2014

Participation Scholarships and Travel Grants

- Grace Hopper Conference for Women in Computing, 2015, 2016, 2018
- International Wkshp. on Security and Privacy Analytics, 2017
- Women in CyberSecurity, 2016, 2017
- Computing Research Association for Women, 2015

References

- Provided on request