Somnath Rakshit

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EDUCATION

Master of Science, Information Studies
The University of Texas at Austin
Courses taken: Linear Models, Applied Encryption

Bachelor of Technology, Computer Science and Engineering, May/2018
Jalpaguri Government Engineering College, India
Courses taken: Artificial intelligence, Data Mining, Data Structures, Discrete Mathematics

EXPERIENCE

Teaching Assistant, (User Generated Content Analytics), The University of Texas at Austin, Sep/2019 – Current
- Generating business insights from unstructured data including text and images using Python.
- Assisting students with course material and assignments in Machine Learning using Python during office hours.

Researcher, Centre of New Technologies, University of Warsaw, Jan/2019 – Aug/2019
- Generated insights from unstructured images obtained from healthcare providers.
- Quantified and ranked genes based on their expression with regard to a specific disease.

Software Engineer, Cyware Labs, July/2018 – Nov/2018
- Implemented a method to cluster similar articles and assign rank to articles based on their importance.
- Developed an algorithm to determine the trending keywords based on a particular time frame.

PUBLICATIONS AND PROJECTS

Somnath Rakshit, Indrajit Saha, Dariusz Plewczynski, “Deep Learning for Detection and Localization of Thoracic Diseases using Chest X Ray Imagery”, 18th International Conference on Artificial Intelligence and Soft Computing, June, 2019, Zakopane, Poland

Indrajit Saha, **Somnath Rakshit**, Tanay Ghosh, “Machine Learning for Object Labelling”, IEEE TENCON, July, 2018 Jeju Island, South Korea

Identifying Land Patterns from Satellite Imagery in Amazon Rainforest, Jan/2018
- Multi label classification of land patterns in Amazon Rainforests using Keras.
- Results obtained demonstrate state of the art accuracy.

Detection and Localisation of Diabetic Retinopathy, April/2018
- Classification and localization of diabetic retinopathy was performed using Keras in fundus images.
- Resultant model with 10x lesser parameters achieved similar performance as state of the art models.

SKILLS

Programming Languages: Python, Java, R
Frameworks: PyTorch, Tensorflow, Keras, scikit-learn, Numpy, Scipy, Pandas, Matplotlib, Git, Django
Databases: Elasticsearch, MySQL

AWARDS AND ACTIVITIES

Reviewer: IEEE-EMBS International Conference on Biomedical and Health Informatics 2019, Chicago, IL, USA
Best Paper Award, RTITM 2017, Jalpaiguri, India
Secretary, Coders Club, Jalpaiguri Government Engineering College (Aug/2017 – May/2018)