

# Somnath Rakshit

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**OBJECTIVE:** Masters student experienced at creating computer vision models using deep learning to classify and label objects from images, seeking data science role involving machine learning. Worked on natural language processing models using deep learning to rank, classify and cluster news articles and analyzed large volume of data to deliver insights and implement action-oriented solutions to complex business problems.

## EDUCATION

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### 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

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### 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, June/2019 – Nov/2019

- 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

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**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

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**Programming Languages:** Python, Java, R

**Frameworks:** PyTorch, Tensorflow, Keras, scikit-learn, Numpy, Scipy, Pandas, Matplotlib, Git, Django

**Databases:** Elasticsearch, MySQL

## HONORS AND SERVICES

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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)