# **Curriculum Vitae: Tatiana Chakravorti**

#### **Personal Details:**

Name: Tatiana Chakravorti Phone Number: Mob: (+1)5708626559

Email ID: <u>tatianareshmi@gmail.com</u>, tfc5416@psu.edu

**Objective:** 

To secure a challenging and creative position where my drive and knowledge can be utilized for the overall growth of my personal as well as the institution.

Google Scholar link: https://scholar.google.com/citations?user= K5elXAAAAAJ&hl=en&oi=ao

### **Academic Qualification:**

PhD in Informatics (Currently Pursuing)

GPA = 3.7/4

Institute: Penn State University

Dept: Information Science and Technology (IST)

Supervisor: Dr. Sarah Rajtmajer

PhD in Electronics and Communication Engineering (ECE)

Institution: Siksha 'O' Anusandhan (Deemed to be University), Bhubaneswar, India

CGPA: 8.66/10 (Course Work) Supervisor: Prof. (Dr.) P. K Dash

Thesis Title: Machine Learning Techniques for Analysis and Pattern Recognition of Non-

stationary Signals and Non-linear Systems

Year: 2019

M.Tech in Electronics and Communication Engineering

Institution: West Bengal University of Technology

CGPA: 8.29/10 Year: 2014

**B.Tech** in Electronics and Communication Engineering

Institution: West Bengal University of Technology

CGPA: 7.37/10 Year: 2011

Higher Secondary in Science

Institution: Kamala Girls' School

Percentage: 73% Year: 2007

**Secondary** in Science

Institution: Kamala Girls' School

Percentage: 84%

Year: 2005

#### **Research Interests:**

My research interest is in artificial intelligence, data science and machine learning algorithms for the prediction and classification of different real-time data sets. Currently, I am working in the hybrid prediction markets with artificial agents and human participants for determining experimental reproducibility. Previously, I have worked on datasets collected from wide-area monitoring systems, detection and classification of disturbances, such as faults, islanding, and different power quality events.

### **Work Experience:**

- 1. Working as a Teaching Assistant in Privacy and Security for Dara Sciences from 1<sup>st</sup> Aug 2022.
- 2. Working as a Research Assistant in DARPA SCORE Project from 1<sup>st</sup> Aug 2021 to 31<sup>st</sup> 2022.
- 3. Worked as an Assistant Professor at KLEF (Deemed to be University) in Vijayawada, Andhra Pradesh from 25<sup>th</sup> March 2019 to 18<sup>th</sup> Dec 2020.
- 4. Worked as a lecturer in the practical training courses and also worked in the research project LINDA (Local Island Power Supply and Accelerated Grid Restoration with Distributed Generation Systems in Case of Large-Scale Blackouts) from 1<sup>st</sup> October to 27<sup>th</sup> December 2017 at the University of Applied Science, Augsburg, Germany.
- 5. Worked as Visiting Faculty at Dr. Sudhir Chandra Sur Degree Engineering College in Kolkata from Aug 2014 to Dec 2014.
- 6. Worked as Teaching Assistant during master's degree from 1<sup>st</sup> August 2013 to 31<sup>st</sup> December 2013 at Netaji Subhas Engineering College, Kolkata.
- 7. Worked as a Project Assistant in the Department of Electrical Engineering of IIT Madras from 10<sup>th</sup> April 2012 to 14<sup>th</sup> July 2012 in signal processing in high voltage engineering.

### **B.tech and M.Tech Project Guided:**

- 1. Supervisor of B.Tech project; Title: "Real World Anomaly Activity Detection in Surveillance Videos using Deep learning", at KL University (Deemed to be), Vijayawada, 2019.
- 2. Supervisor of B.Tech project; Title: "Design of LORA data Trans-receiver System", at KL University (Deemed to be), Vijayawada, 2019
- 3. Guided M.Tech thesis as a Co-Supervisor; Title: "Power Quality Pattern Recognition and Classification using the combination of HHT and Fuzzy Logic", June, 2017, at Siksha 'O' Anusandhan University (Deemed to be university), Bhubaneswar, India.

# **Academic Activities:**

- 1. Worked as a course coordinator (CC) of Machine Learning Skilling at KL University.
- 2. Organizing Committee Member in the 2015 IEEE Power, Communication and Information Technology Conference held at Siksha 'O' Anusandhan University (Deemed to be university), Bhubaneswar, India, from 15-17<sup>th</sup> October 2015.

## **Administrative Experience:**

- 1. Worked as Dept. Library In-charge and Girls Hostel in charge at KLEF.
- 2. Dept. In charge of Faculty Orientation Lecture
- 3. Dept Coordinator of International wing

#### **Publications:**

#### **International Journals:**

- 1. B. M. Chidvilas, K. S. Pavan, S.K. Kiran, M. M. Kanth, V. S. Bhagavan and T. Chakravorti: "Real-time Anomaly Detection using Tensorflow based RNN Deep Learning Classifier", *Journal of Advanced Research in Dynamical and Control Systems, Scopus, Impact factor:* 0.27, 2020.
- 2. Chakravorti, Tatiana, and Penke Satyanarayana. "Non linear system identification using kernel based exponentially extended random vector functional link network." *Applied Soft Computing 89, 106117, 2020, SCI, Impact factor: 6.725, Elsevier.*
- 3. Tatiana Chakravorti, B. N. Sahu and P. K. Dash; "Detection of Islanding and Non-islanding disturbances in Microgrid using Firefly Optimized Variational Mode Decomposition and Robust Regularized Random Vector Functional Link Network" in *Engineering Applications of Artificial Intelligence*, 2019, SCI, Impact factor: 6.212, Elsevier.
- 4. Tatiana Chakravorti, N. R. Nayak, R. Bisoi, P. K. Dash and L. Tripathy, "A New Robust Kernel Ridge Regression Classifier for Islanding and power quality disturbances in a Multi Distributed Generation Based Microgrid" in *Renewable Energy Focus, ESCI, (Elsevier), Impact factor: 0.81, 28(2019): 78-99.*
- 5. Chakravorti, Tatiana, N.R.Nayak, Ranjeeta Bisoi. "A Hybrid hilbert huang transform and improved fuzzy decision tree classifier for assessment of power quality disturbances in a grid connected distributed generation system." *International Journal of Power and Energy Conversion, Scopus, Impact Factor: 0.43, (2018).*
- 6. Chakravorti, Tatiana, and Pradipta Kishore Dash. "Multiclass power quality events classification using variational mode decomposition with fast reduced kernel extreme learning machine-based feature selection." *IET Science, Measurement & Technology*, *SCI, Impact Factor: 1.914, 12, no. 1 (2017): 106-117.*
- 7. Chakravorti, Tatiana, Rajesh Kumar Patnaik, and Pradipta Kishore Dash. "Detection and classification of islanding and power quality disturbances in microgrid using hybrid signal processing and data mining techniques." *IET Signal Processing*, *SCI*, *Impact Factor: 1.5*, 12, no. 1 (2017): 82-94.
- 8. Chakravorti, Tatiana, Rajesh Kumar Patnaik, and Praditpta Kishor Dash. "Advanced signal processing techniques for multiclass disturbance detection and classification in microgrids." *IET Science, Measurement & Technology, SCI, Impact Factor: 1.914, 11, no. 4 (2017): 504-515.*
- 9. Nanda, Sarita, Tatiana Chakravorti, and P. K. Dash. "A new Taylor-LMS adaptive filter for parameter estimation of power signals including distributed generation systems." Australian Journal of Electrical and Electronics Engineering (Taylor & Francis), Impact factor: 0.43, Scopus, 13, no. 3 (2016): 174-194.
- 10. Nanda, Sarita, P. K. Dash, Tatiana Chakravorti, and Shazia Hasan. "A quadratic polynomial signal model and fuzzy adaptive filter for frequency and parameter estimation

of nonstationary power signals." Measurement (Elsevier), SCI, Impact Factor: 3.927, 87 (2016): 274-293.

### **International Conferences:**

- 1. Tatiana Chakravorti. "Classification of Power Quality Disturbances using Adaptive Variational Mode Decomposition based Random Vector Functional Link Network", (TENSYMP), 2019.
- 2. Das, Debashreeta, Tatiana Chakravorti, and P. K. Dash. "Hilbert huang transform with fuzzy rules for feature selection and classification of power quality disturbances." In *Electrical, Computer and Electronics (UPCON), 2017 4th IEEE Uttar Pradesh Section International Conference on*, pp. 439-445, Available in IEEE Xplore, 2017.
- 3. Chakravorti, Tatiana, and P. K. Dash. "Morphology based fuzzy approach for detection & classification of simultanious power quality disturbances." In *India Conference* (INDICON), 2016 IEEE Annual, pp. 1-6, Available in IEEE Xplore, 2016.
- 4. Chakravorti, T., R. K. Patnaik, and P. K. Dash. "A morphological filter based disturbance detection and classification technique for DFIG wind farm based microgrid." In *Power, Communication and Information Technology Conference (PCITC)*, 2015, Available in IEEE Xplore, pp. 979-985, 2015.

#### **Skills:**

Python, Matlab/Simulink, Microsoft Office, C language

#### **Personal Interests:**

Singing, badminton, traveling, and swimming