Moitrayee Chatterjee

moitrayee.c@gmail.com • https://www.linkedin.com/in/moitrayee-moi-chatterjee-a0ab7222/
+1 (806) 620-1850 • 210 N Winston Avenue • Lubbock, 79416 • Texas • USA

Summary

Deep Learning and Cyber Security enthusiast, Computer Science PhD student at Texas Tech University.

Research work focused on applications of statistical and deep learning paradigm to solve cyber security problems, as well as developing time and space efficient algorithms to process large scale datasets. Mining massive data sets, item set mining and clustering are a few key areas I have been working on.

My active research involves application of statistical methods like Dempster Shafer Theory (Evidence theory) and deep learning algorithms in the area of web spam and malicious website detection, malware classification, botnet identification etc.

I also have almost 8 years of professional experience with Cognizant Technology Solutions. My roles and responsibilities involved handling and interpreting data. Handling client databases, querying large data sets, designing database schema, writing efficient stored procedures and functions to retrieve data through complex queries and processing the results were a few key tasks I was engaged in.

Experience

Texas Tech University
Lubbock, Texas, USA

Cyber Security reasearch focused PhD Student — *August 2016 – Present*

Application of statistical and deep learning algorithms to solve problems related to cyber security problems, and natural language processing, recommendation systems using matrix factorization are a few key areas of my research work.

Teaching Assistant — *August 2016 – December 2018*

Help design course/lab, prepare lecture materials, construct exams/quizzes, teach both graduate level and undergraduate classes. Holding office hours to have one-to-one meeting with students to help them with any difficulties they face in the learning of the subject. Grading lab/ assignments/ quizzes/ exams etc.

CogDev Malaysia Sdn. Bhd.
Kuala Lumpur, Malaysia

Systems Analyst — *August 2015 – August 2016*

Analyzing, Designing, Developing, Unit Testing and Maintaining Various Modules/Routines related to Migration and Loading of Data. Resolving incidents related to data Migration and Data Integration as well as application. Acting as a data integration coordinator and data integration expert in Oracle Siebel On Demand, identifying key developments and opportunities. Performing data loads for multiple environments simultaneously. Understanding the integration requirements directly from end users and help in implementing the design development process. Implementation of the virtual private database for data security and visibility according to the Country. To suggest and highlight key improvement areas across projects as part of the process improvement.

Cognizant Technology Solutions Pvt Ltd
KOLKATA, INDIA

Associate — *Feb 2009 - August 2015*

Responsible for developing components depending upon business requirements Performing unit testing of the developed components. Managing junior team members and grooming them to get into the project as well as responsible for effort estimation and status report.

Please refer to my Linkedin profile for the complete list of work experiences along with recommendations.

Education

Texas Tech University		Lubbock, Texas, USA
PhD and MS in Computer Science		*August 2016 – August 2020*
West Bengal University of Technology		Kolkata, India
BS in Computer Science		*August 2004 – August 2008*

Skills

Research: Data Mining, Artificial and deep Neural Nets, Matrix Factorization, Data Compression (PCA), Algorithm and Complexity, Cyber Security, Natural Language Processing
Programming: C/C++, Python, Java, R, Matlab, Pl/SQL

Publications:

Moitrayee Chatterjee, Akbar Siami Namin, "Detecting Web Spams Using Evidence Theory", IEEE Computer Software and Applications Conference(COMPSAC 2018), Tokyo, Japan

Moitrayee Chatterjee, Akbar Siami Namin, Prerit Datta, "Evidence Fusion for Malicious Bot Detection in IoT", IEEE BigData 2018, Seattle, USA

Prerit Datta, Akbar Siami Namin, and Moitrayee Chatterjee, "A Survey of Privacy Concerns in Wearable Devices", IEEE BigData 2018, Seattle, USA

Chatterjee, M. and Namin, A.S., 2019. "Deep Reinforcement Learning for Detecting Malicious Websites", arXiv preprint arXiv:1905.09207.

Conferences:

Blackhat USA 2017 Las Vegas, NV

DEF CON 25 July 2017, Las Vegas, NV

COMPSAC 2018 July 2018, Tokyo, Japan

IEEE BigData 2018 December 2018, Seattle, USA

COMPSAC 2019 July 2018, Milwaukee, WI, USA

Workshops:

CRA-W Grad Cohort April 2018, San Fransisco, CA

The Groundwork Program Teaching Training for Graduate Students, May 2018, Lubbock, Texas

Workshop on Digital Forensics A 3-day workshop, organized and presented by the faculties of Texas Tech University and Sandia National Laboratories. May 2018, Lubbock, TX

Reviewer role:

1. International Journal of Applied Sciences
2. IEEE BigComp 2019, Japan
3. Hindawi Journal: Special Issue on Adaptive Security

Professional Certifications:

Oracle Certified Professional, Java SE 6 Programmer April 2, 2011

Sybase ASE 15.0 SQL Developer Professional May 25, 2010

Awards:

Applause from Cognizant Technology Solutions BFS vertical