# DEBAPRIYA MUKHERJEE

+1 (631)-438-9690 ⋄ debapriya.mukherjee@stonybrook.edu ⋄ https://github.com/Debapriya-M

**LinkedIn:** https://www.linkedin.com/in/debapriya-mukherjee-16b99a79

## EDUCATION

**Master of Science in Computer Science**                    August 2019 - December 2020 (Expected)
*State University of New York at Stony Brook*                    ***GPA: 3.58/4***
- **Coursework:** Data Science, Natural Language Processing, Algorithms, Theory of Computation, Programming Languages, Databases, Visualization, Machine Learning
- **Graduate Teaching Assistant:** Logic in Computer Science

**Bachelor of Technology in Electronics and Communication Engineering**           August 2012 - June 2016
*West Bengal University of Technology, India*                    ***GPA: 8.86/10***
- **Relevant Coursework:** Database Management Systems, Data Structure, Object Oriented Programming with Java, Operating System, Image Processing.

## WORK EXPERIENCE

**Tata Consultancy Services, Kolkata**                    July 2016 - July 2019
*Systems Engineer, Senior Software Developer*
- **CITI Bank - Personal Loan Lending Platform Development Project:** Full-stack development of Personal Loan feature from scratch using Java with Micro-services architecture, Spring boot, MySQL and Angular, reducing manual application process by 85%.
- **Internal Project:** Utility portal creation having a birthday tracker notifier and a blood donation tracker for sending notifications to colleagues from scratch using Angular 4 and Micro-services
- **Order and Service Management Development Project:** Developed a middle-ware system for an international telecommunication client, with an improvement of above 90% in customer order fulfillment created in a CRM system.
- **Project Maintenance:** Provided optimal solutions to priority one critical issues in production with an efficiency of 95%. Monitoring of defects, incident tracking, analysing all the issues and providing fixes.

## TECHNICAL SKILLS

- **Programming Languages:** Java, Python, C, Angular, JavaScript, HTML, XQuery and XPath
- **Technologies and Frameworks:** Micro-services, Spring Framework/Spring Boot, JPA, REST, Web Services/API, Hadoop, Apache Spark, Tensorflow, D3.js, CSS, Tomcat, XML, JSON, SOAP, JIRA, Jenkins, JUnit
- **Databases:** MySQL, IBM DB2
- **Platforms:** Hortonworks Data Platform (HDP) Sandbox, Cloudera, VirtualBox, Linux, Oxygen XML Editor, Google Colab.

## PROJECTS

**Comparative Evaluation of Web Authentication Scheme - Ethos Lab**                    Jan 2020 - Present
Development of a **web crawler** with the aim to extract password policies from all the websites present over the internet to understand the trend of policies over the years using **Python**, **Selenium** and **Scrapy**

**Peer Paper Review Web Application - Ethos Lab**                    Jan 2020 - Present
Development of a **peer grading system web application** for the Network Security course at the university to allow students to review the research papers submitted by their peers in a class using Java Micro-services and Angular.

**Projects on Databases**                    Jan 2020 - May 2020
Covid19 Data Analysis in pseudo-distributed Hadoop and pseudo-distributed Spark using Java, New York State Health Facility Analysis and Opioid Pills Analysis using IBM DB2 Spatial Queries

**Projects on Natural Language Processing**                    Aug 2019 - Dec 2019
Model implementations on word representations for sentiment analysis, semantic analysis, relation extraction, neural network based transition parsing system, skip-gram model and deep average network (DAN) and gated recurrent unit (GRU) models using **Python, Tensorflow**.

**Projects on Data Science: IEEE - CIS Fraud Detection**                    Aug 2019 - Dec 2019
**Kaggle Challenge**, development of scripts for Logistic Regression and XGBoost classifier on a large e-commerce dataset to predict fraud transactions, precision up to 96% using **Python, NumPy, Pandas** and **Scikit-learn**

**Project on Data Science - How good is a chess player**                    Aug 2019 - Dec 2019
Modeling the quality of players based on the sequence of moves and **classify the level of play** of a chess game using features generated by the move sequence of the game using **Python**

**Designing Filters using Heuristic Algorithms**                    Aug 2015 - Jun 2016
A comparative study on designing a Finite Impulse Response low-pass filter using **heuristic search algorithms**. Realization of different functions using optimization techniques in the field of Digital Signal Processing using **Matlab**.

## PAPER PUBLICATION:

*"An improved Cuckoo Search Algorithm for numerical optimization"*
Supriya Dhabal, Debapriya Mukherjee, Sreemoyee Tagore
2016 International Conference on Computer, Electrical  Communication Engineering (**ICCECE**), August 2017.