# Souradeepta Biswas

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## EDUCATION SYRACUSE UNIVERSITY

Syracuse, NY | Dec 2019

Master of Science in Computer Science

Coursework:

Design and Analysis of Algorithms Introduction to Data Science Social Media and Data Mining Neural Program Learning

### NATIONAL INSTITUTE OF TECHNOLOGY

Surat, India | April 2013

Bachelor of Technology in Computer Engineering

Coursework:

Information Security
Database Management
Systems
Data Structures
Network and System Security

#### **SKILLS**

ADVANCED:

C/C++ • Python • SQL

PROFICIENT:

C# • Java • NodeJS • HTML5 • CSS3

**FAMILIAR:** 

MongoDB • Haskell • R

#### **TOOLS**

Visual Studio • Eclipse • Weka • R Studio • Amazon Web Services • Google Cloud Platform • IBM Bluemix • Jira • Git • Jupyter Notebook

#### **CERTIFICATES**

Certified Scrum Master • IBM Bluemix Essentials • Big Data Fundamentals

#### **AWARDS**

MANAGER'S CHOICE

Awarded for having the best deliverable quality of 98% in a team of 20.

#### **EXPERIENCE**

IBM INDIA | System Engineer

Bangalore, India | Nov 2014 - Dec 2017

- Developed NodeJS, MongoDB web app for new ICD10 patient health data aggregation. PHI compliant data retrieval and maintenance along with portal for the customer to view health history. Overhaul of legacy system, improved claim processing by 100%.
- Was a Scrum Master of 20 member team. Saved 10 hours/week on meetings.
- Developed Java apps to interact with claims on the Mainframe for customer bill and subscription notification. Helped reduce paper notifications and cost by 20%.

### IBM INDIA | Associate System Engineer

Bangalore, India | Nov 2013 - Nov 2014 |

- Developed and maintained COBOL programs for US Healthcare companies. Improving existing claims, membership handling and updating new features to the legacy system meeting SLA target of above 95%.
- Mentored 10 new team members on Watson Cognitive systems saving over 60 person-hours.

#### **PROJECTS**

#### AGENT-BASED OPTIMIZATION ON NEURAL PROGRAM INTERPRETERS

Feb 2019 - Ongoing

- Extend the Neural Program Interpreter architecture using Deep Reinforcement Learning based reward system and creating task based policies.
- Improve the generalization and performance of the new architecture compared to the existing one.

#### LIBX | Nov 2018 - Ongoing

- Developed a C# application with MS Access back-end where Employees can access functions such as pick, drop, post shifts.
- Designed a portal for supervisors to approve and manage shifts and employees. Message board for notices and queries.
- Application developed for Syracuse University Library.

#### **REMOTE PACKAGE DEPENDENCY ANALYSIS** | Aug 2018 - Dec 2018

- Multi-threaded C# app using WCF, WPF which performs type-based analysis and strong component indicator using Trajan's algorithm for performance measurement.
- Tokenized parser allows expansion for new languages.

#### PREDICTING BOXOFFICE REVENUE USING TWEETS | Aug 2018 - Dec 2018

- Performed sentiment analysis on tweets using Python NLTK package and trained multiple classification models - Bernoulli Naive Bayes, Linear SVC, Logistic Regression for accuracy
- Created additional features like theaters released in, day/month of release, Starmeter rating from IMDB.
- Machine Learning model can be applied to similar data sets for predicting revenue for marketing and advertising.