DIPTANU SARKAR

EDUCATION

Rochester Institute of Technology Master of Science in Computer Science GPA: 4.0

Expected: Dec 2020

National Institute of Technology Agartala

GPA: 3.62

Bachelor of Technology in Electronics and Communication Engineering

Earned: Jun 2015

SKILLS

Languages: Java, Python, Ruby, PHP

UI & Webservices: HTML, CSS, JSP, Angular, JavaScript, REST API Databases: MySQL, PostgreSQL, Oracle Database, MongoDB

Libraries & Tools: Scikit-Learn, NLTK, PyTorch, OpenCV, TensorFlow, Azure, Git, Jira

EXPERIENCE

Rochester Institute of Technology

Graduate Research Assistant

May 2019 - Present

 Research to design a model based on word importance in utterances using machine learning for Automatic Speech Recognition(ASR) systems to provide better accessibility to the deaf or hard of hearing(DHH) community.

Course Grader Aug 2019 - Present

 Conducting weekly meetings with students, code-review and grading the assignments for Advanced Object-Oriented Programming Concepts in Java under Dr. Hans-Peter Bischof.

Infosys

Senior Systems Engineer

May 2017 - Jun 2018

- Implemented highly reliable REST API's in a distributed eco-system to handle the configuration for activating services on encoders. (Ruby, Rails, MongoDB)
- Improved overall efficiency and responsiveness of a financial web-portal by 30% using content distribution network and horizontal scaling. Incorporated a 2-D authentication service across the platform with 1M+ monthly active users. (Java, JSP, Spring, Hibernate, Oracle Database)

Systems Engineer Nov 2015 - Apr 2017

- Designed and implemented an automation framework to run automation routines on UI's/dashboards;
 reduced the manual effort by 80%. (Ruby, Selenium, RSpec, XML)
- Developed the captive portal of a wireless gateway with advanced management tools and parental controls;
 200K+ users in the USA. (HTML, CSS, Bootstrap, JavaScript, PHP, Ajax)

Personal Projects

Language identification (Python, NumPy, SciPy, Scikit-learn)

bit.ly/lang-id

 Detect the text language using a bigram model, Support Vector Machines, and Convolutional Neural Networks.

E-commerce webservice (Java, JSP, Springboot, JDBC, MySQL)

bit.ly/ecom-ws

- Developed an online bookselling website with the search, users, reviews, orders management capabilities and features such as customer registration, shopping cart, and checkout.

Bot to play Doom (Python, PyTorch, Gym)

bit.ly/doom-bt

 Designed an intelligent agent to play the game Doom in a 3D environment using Deep Convolutional Q Learning.

To-do application (Java, Angular, SQLite)

bit.ly/todos-app

- Implemented a full-stack to-do web application with email reminders.

Data mining on IMDB dataset (Python, PostgreSQL, MongoDB)

bit.ly/imdb-dm

 Created schema to store the IMDB data efficiently using PostgreSQL and MongoDB. Performed data cleaning and integration, functional dependency mining, k-means clustering and itemset mining on the dataset.

AWARDS

Merit Scholarship, Rochester Institute of Technology Company-wide Recognition, Infosys National Merit Scholarship, Govt. of India 2018, 2019

2017

2011-15