TEJAS SARMA

(312) 451-8565 tsarma2@uic.edu

EDUCATION

http://bit.ly/sarmatejas

University of Illinois Chicago, IL

Master of Science, Computer Science, 3.9

May 2019

Selected Coursework: Data Mining and Text Mining, Artificial Intelligence (Algorithms, Methods, Applications, and Safety), Computer Algorithms, Human Computer Interaction, Database Systems, Advanced Machine Learning

Graduate Student Representative for department of Computer Science

University of Mumbai Mumbai, India

Bachelor of Engineering, Electronics Engineering

May 2017

Sir Ratan Tata Technical **Scholarship** for Engineering Students

SKILLS

Languages: (Proficient) Python; (Familiar) C, C++, Java, HTML, CSS, JavaScript, MySQL, ROS Frameworks and Tools: TensorFlow, PyTorch, Keras, NLTK, Android, Git, Flask, Bootstrap **EXPERIENCE**

Graduate Student Researcher: Artificial Intelligence and Robotics Laboratory

May 2018 - Present

University of Illinois

Chicago, IL

- Enabled visualization of Baxter Robot in Unity, for control using HTC Vive, using ROS#
- Implementing trajectory planning and grasp detection by using Joint Angle-Cartesian transformation

Graduate Teaching Assistant

Feb 2018 – Aug 2018

University of Illinois

Chicago, IL

- Courses: User Interface Design and Development, and Database Systems
- Assisted in management of coursework, conducting studio sessions, and creation and grading of assignments and tests

Undergraduate Student Researcher

May 2015 – Dec 2017

Daemo, Stanford CrowdResearch, Stanford University

Co-developed the Boomerang taskfeed mechanism, and Open-Gov model, and Constitution model for Daemo

Course co-creator and Participant

Feb 2016 - Dec 2017

Stanford Scholar, Stanford University

Headed the creation of the online course: "Data Science and Machine Learning using Python".

Android Developer Intern

Dec 2014 - Jan 2015

Weailant

Mumbai, India

Contributed to development of Android App for Wegilant (provider of Security systems for organizations)

PROJECTS

Baxter™ Robot Motion Planning for Autonomous Execution of Self-Learned Tasks

Aug 2018 – Present

- Training Baxter Robot to learn Block Slot Sorter game, using approximate Q-Learning
- Achieved grasp-detection by using end-effector to Cartesian distance mapping, with Computer Vision

Automatic Image Captioning using InceptionV3

October 2018

Achieved 53% test accuracy, by applying InceptionV3 and Deep LSTMs for Microsoft COCO Dataset (~20GB)

Aspect Based Sentiment Classification

Mar 2018 – May 2018

Achieved 73% test accuracy, by applying Linear SVMs for Aspect Sentiment Classification of Amazon & Yelp reviews

MonoRL: Reinforcement Learning Agent for Intelligent Monopoly

Feb 2018 - May 2018

Achieved 61% wins, by implementing ε -Greedy Q(λ)-Learning agent for playing Monopoly, modelled as an MDP

MonoRL was challenged by a Fixed Policy Agent, and a Random Agent, in a total of 100 test games

CereBro: Intuitive scheduling for direct knowledge sharing

Aug 2017 – Dec 2017

Co-developed mobile platform, which helps bring together students for direct knowledge sharing within a university.

Led the development of the Android Application and integration of Retrofit data onto the front-end

Triton: Predictive Assistance for Amateur Stock Traders

Achieved 98% test accuracy, by applying Deep NNs to predict weekly stock prices for 10 companies trading on NYSE

PUBLICATIONS AND CONFERENCES

- 6 co-authored Papers/Publications at UIST(2015, 2016), CSCW(2017), HCOMP(2017) and CCI(2017)
- Student Volunteer, CSCW 2017, Portland, OR

February 2017 - March 2017