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http://bit.ly/sarmatejas

EDUCATION

University of Illinois

Chicago, IL

Master of Science, Computer Science, 3.83

May 2019

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

Wegilant

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 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

Jul 2016 – Mar 2017

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