Chicago, IL

TEJAS SARMA

(312) 451-8565

bit.ly/sarmatejas /github.com/sarmatejas1006

tsarma2@uic.edu

EDUCATION

University of Illinois at Chicago   **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: UIC Artificial Intelligence and Robotics Laboratory   *May 2018 – Present*

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

Graduate Teaching Assistant   *Feb 2018 – Aug 2018*

University of Illinois at Chicago   *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^{TM} 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   *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*