

# TEJAS SARMA

720 S Laflin St, Apt 2R, Chicago, IL – 60607

Website: <https://goo.gl/23dJXv>

Phone: 312-451-8565

Email: [tsarma2@uic.edu](mailto:tsarma2@uic.edu)

## EDUCATION

**University of Illinois – Chicago, IL GPA: 3.83/ 4.0**

**Master of Science (M.S.), Computer Science**

**Aug 2017 - May 2019**

- Relevant Coursework: Data Mining and Text Mining, AI: Safety, AI: Methods and Applications, Artificial Intelligence, Computer Algorithms, Human Computer Interaction, Database Systems
- **Graduate Student Representative** for Computer Science

**University of Mumbai – Mumbai, India**

**Bachelor of Engineering in Electronics Engineering;**

**July 2013 - June 2017**

- Relevant Coursework: Artificial Intelligence, Object oriented programming, Advanced Computer Networks
- Recipient of **Sir Ratan Tata Technical Scholarship for Engineering Students**
- Workshop on Cloud Computing at **Indian Institute of Technology, Delhi**

## EXPERIENCE

**University of Illinois at Chicago**

**Graduate Student Researcher: Artificial Intelligence and Robotics Laboratory**

**May 2018 – Present**

- Inverse Reinforcement Learning based **Virtual Reality** control interface for **Baxter Robot**
- Robot Motion Planning for Autonomous Execution of Self-Learned Level - 1 games (Masters' Thesis)

**Graduate Teaching Assistant**

**Feb 2018 – Aug 2018**

- **Tasks:** Coursework management, Creating, managing, and Grading tests and assignments, Classroom studio sessions
- CS 422: User Interface Design and Development (Spring 2018), [CS 480: Database Systems (Summer 2018)]

**Stanford CrowdResearch, Stanford University (Daemo Crowdsourcing Platform)**

**May 2015 – Dec 2017**

- Contributed to platform pilot studies, developing the “Boomerang taskfeed mechanism”, and “Open-Gov model”
- Part of front end development, and team responsible for designing and developing constitution model for Daemo

**Stanford Scholar program, Stanford University (Student participant and course co-creator)**

**Feb 2016 – Dec 2017**

- Admin for creation of the online course: “*Data Science and Machine Learning using Python*”.
- Co-created short talks on CS papers on Machine Learning, HCI, Crowdsourcing, Computer Vision, and Security.

**Wegilant, Mumbai: Android Developer Intern**

**Dec 2014 – Jan 2015**

- Android Developer Intern at Wegilant, a company that provided Security systems and infrastructure for organizations.

## SKILLS AND PROJECTS

**SOFTWARE SKILLS:** Python (TensorFlow, PyTorch), C, C++, Java (Android), HTML, CSS, MySQL, Robot OS (ROS)

**TECHNICAL SKILLS:** Reinforcement Learning, Machine Learning, Data Science (Analysis and Mining), NLP

## PROJECTS

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

**Aug 2018 – Present**

- Master's Thesis Research Project to teach the *Baxter* robot to play level-1 games(e.g. pattern blocks)

**Aspect Based Sentiment Classification**

**Mar 2018 – May 2018**

- Aspect Sentiment Classification of product reviews with Linear Support Vector Machine Classifier (73% accuracy)

**MonoRL: Reinforcement Learning Agent for Intelligent Monopoly**

**Feb 2018 – May 2018**

- Reinforcement Learning agent for playing Monopoly, modelled as a Markov decision Process (MDP)
- Implemented 3 agents: An  $\epsilon$ -Greedy  $Q(\lambda)$ -Learning Agent, A Fixed Policy Agent, and a Random Agent

**CereBro: Intuitive scheduling for direct knowledge sharing**

**Aug – Dec 2017**

- Android Application that helps bring together students for direct knowledge sharing within a university.
- Led the development of the Android Platform and integration of data sent by Retrofit into the front-end

**Triton: Predictive Assistance for Amateur Stock Traders**

**Jul 2016 – Mar 2017**

- Weekly predictions of opening stock prices for select companies listed under the NYSE (98% test accuracy)
- Performed Data Analysis, Cleaning, and Training of Neural Network used in the project.

**Segregator Robot using Firebird V Robotic Research Platform**

**Jan – April 2016**

- Built a segregator robot that categorizes and transports objects to assigned drop-off areas (similar to dock cranes)

## 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**