

## EMPLOYMENT

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**Research and Teaching Assistant**      **University of Illinois at Chicago**      **Aug 2011 - Present**

- Created an algorithm to learn classification model utilizing zero-sum game theory (Asif et. al. 2015).
- Implemented the Single Oracle algorithm for efficient sequence tagging (Li et. al. 2016). Created C++ library wrapper and used JNI to use it from *Java*. Extended the classifier to sequence tagging.
- Instructed a diverse body of undergraduate students for 4 years as a Teaching Assistant in the courses of Algorithms, Software Design, Discrete Mathematics, and C/C++ Matlab for Engineers. Instructed in labs, graded exam papers and held office hours to help students. Received a 4.6/5.0 evaluation by the students.

**Machine Learning Intern**      **Sentient Technologies, CA**      **May 2018 - Aug 2018**

- Applied deep-learning in stock prediction. Compared extracted features, convolutional, and recurrent networks.
- Improved prediction using Multi-task learning.

**Global Test Team Intern**      **ARRIS, PA**      **May 2013 - Aug 2013**

- Developed DLLs to test hardware using C# as a part of an existing library. Created a wrapper using WaitHandle to make synchronous communication accessing the asynchronous data-read driver. It saved testing time from manually waiting for different stages by automating the test.
- Created a batch-script to facilitate easier updates of the test modules in individual test machines.

**Software Engineer**      **QI Analysis, Inc., NJ**      **Aug 2009 - Aug 2011**

- Worked on developing and improving features of an email based social relationship analysis software, using .NET framework. Built test-installations tracker by modifying a Joomla based website using PHP.

**Adjunct Faculty**      **IBAIS University, Dhaka**      **Mar 2010 - Oct 2010**

- Designed syllabus, taught and graded exams for the course Data Structures for two semesters.

## EDUCATION

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**PhD in Computer Science**      **University of Illinois at Chicago**      **May 2019**

- Coursework: Algorithms; Machine Learning; Distributed Computing; Computer Networks; Data and Text Mining; Advanced NLP; Visualization and Visual Analytics.
- Research Area: Cost-sensitive classification using adversarial approach employing Game Theory.

### *Publications*

- **Kaiser Asif**, Wei Xing, Sima Behpour, Brian D. Ziebart, *Adversarial Cost-Sensitive Classification*, International Conference on Uncertainty in Artificial Intelligence (UAI), 2015.
- Jia Li\*, **Kaiser Asif\***, Hong Wang, Brian D. Ziebart, and Tanya Berger-Wolf, *Adversarial Sequence Tagging*, International Joint Conference on Artificial Intelligence (IJCAI), 2016.
- Rizal Fathony, Anqi Liu, **Kaiser Asif**, and Brian Ziebart, *Adversarial Multiclass Classification: A Risk Minimization Perspective*, Advances in Neural Information Processing Systems (NIPS), 2016.
- Hong Wang, Wei Xing, **Kaiser Asif**, Brian D. Ziebart, *Adversarial Prediction Games for Multivariate Losses*, Advances in Neural Information Processing Systems (NIPS), 2015.
- Rizal Fathony, **Kaiser Asif**, Anqi Liu, Mohammad Ali Bashiri, Wei Xing, Sima Behpour, Xinhua Zhang, Brian D Ziebart, *Consistent Robust Adversarial Prediction for General Multiclass Classification*, arXiv preprint arXiv:1812.07526, 2018.

**BS in Computer Science**      **Bangladesh University of Engineering and Technology (BUET)**      **Mar 2009**

- Coursework: Software Analysis and Design; Programming Languages; Algorithms; Database; Artificial Intelligence; Operating Systems; Graph Theory; Compiler; Pattern Recognition; Computer Architecture.

## TECHNICAL EXPERIENCE

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### Projects

- **Movie Actor Prediction** (2015). From Cornell Movie-Dialog corpus, we used multi-class SVM to predict preferable actor for a specific role in a movie. We used features like title, genre and LDA topic model. Python
- **IMDB Movie Rating Prediction** (2013). Predicted ratings of a movie using features like movie length, actor's magazine cover count, budget etc, using Linear Regression, SVR and Neural Network. Python, Scikit-Learn
- **Opinion Mining** (2012). Implemented opinion mining of product reviews using semantic orientation.
- **Autonomous System (ASN) Analysis** (2011). Analyzed AS network using traceroute and bash scripting.
- **iPhone Reminder App** (2009). Developed an iPhone app for creating custom reminders with push notification. Cocoa, Objective-C
- **3D Pen-fight Game** (2008). In this project of Computer Graphics, I worked in the physics of collision detection by incorporating deceleration, size and movements of the objects. C++, OpenGL
- **Garments Automation Software** (2008). Designed and implemented automation of a garments company as a System Analysis and Design project. C#, ASP.NET, MS SQL Server

### ADDITIONAL EXPERIENCE AND AWARDS

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- **Volunteer:** Chicago Open House greeter (2016). UAI student volunteer (2015). Volunteer developer of Sahana (a disaster management software) for Bangladesh Disaster Management Bureau (2008).
- **Merit Scholarships:** National Education Board Scholarship (Bangladesh) for the result in high school graduation. Dean's award in undergraduate. Merit Scholarship for 5th position in undergraduate admission test.

### LANGUAGES AND TECHNOLOGIES

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- Java; SQL; C++; C; Python; Objective-C; C#.NET; Matlab
- Eclipse; Visual Studio; Microsoft SQL Server; XCode