

Amlaan Bhoi

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1720 S Michigan Ave Apt 2212, Chicago, IL 60616

EDUCATION

- **University of Illinois at Chicago** Chicago, IL
Master of Science (M.S.) in Computer Science; GPA: 3.80/4.0 Expected May 2019
 - **Advisor:** Prof Xinhua Zhang
 - **Relevant Coursework:** Advanced Machine Learning, Applied Artificial Intelligence, Data Mining & Text Mining, Introduction to Data Science, Virtual & Augmented Reality
- **Amity University** Noida, India
Bachelor of Technology (B.Tech) in Computer Science and Engineering; GPA: 3.31/4.0 July 2013 - May 2017

EXPERIENCE

- **CCC Information Services** Chicago, IL
R&D Intern (Computer Vision) May 2018 - Present
 - **TagNet 1.0:** Designed and trained a custom convolutional network architecture for detecting 16 different views of a car with an average F1-score of 0.95 on a dataset of 60k images.
 - **TvR 1.2 (Total Loss vs Repairable):** Trained an ensemble of InceptionResNetV2, MobileNetV2, and Xception models on 1M automobile images with 94.7% accuracy and average inference time of 250 ms per image currently deployed in production.
- **Reliance Communications** Navi Mumbai, India
Intern May 2016 - July 2016
 - **Architecture Node Maintenance:** Reduced node maintenance costs of network infrastructure by 25% by implementing A* search algorithm on vulnerable nodes.
- **OSSCube Solutions** Noida, India
Software Engineer Intern May 2015 - July 2015
 - **Squeek iOS Twitter Application:** Developed iOS Twitter client using REST and Fabric SDK to authenticate user, parse JSON data, and create and show appropriate and customized views to user.

PROJECTS

- **Optical Character Recognition using Conditional Random Fields (Python, Numpy, Tensorflow):**
 - Achieved 84% letter-wise accuracy with CRF implementation in $O(m|\mathcal{Y}|^2)$ complexity.
 - Wrote parallel implementation using PETSc and Tao (LBFGS optimizer) and achieved 77.1% letter-wise accuracy.
- **Aspect-based Sentiment Analysis (Python, C++, Numpy, Tensorflow):** Achieved 78.66% accuracy, 0.69 F-1 score with Deep Memory Networks (MemNet) on SemEval 2014 dataset.
- **Alethea (Python, Javascript, Keras, Tensorflow, React):**
 - Achieved 81.9% sentiment analysis accuracy using Multiplicative LSTMs on Yelp Reviews dataset.
 - Achieved 91.3% accuracy predicting types of robberies occurring in Chicago for the Summer of 2018 based on previous crime and weather datasets.
- **Lifeguard.io (Python, Microsoft CNTK, OpenCV):** Trained a 3D-CNN object detection CNTK model to detect drowning people in swimming pool videos with 56% accuracy.

ADDITIONAL EXPERIENCE & ACHIEVEMENTS

- **CVPR 2018:** Presented a poster on *Tiramisu DenseNet Architecture for Precise Segmentation* at Intel AI Booth
- **Intel AI Student Ambassador:** Shared research on Artificial Intelligence, Machine Learning, & Deep Learning on Intel DevMesh
- **Best Microsoft Hack - HackHarvard 2017:** 1st out of 220 teams
- **Google Games: Campus Edition 2016 - UIC:** 16th out of 50 teams
- **Best in Technical Innovation - Amity University:** 1st out of 800 students
- **ACM Amity Student Chapter - Amity University:** Vice-chair (Jan 2015 - September 2017)

LANGUAGES AND TECHNOLOGIES

- Python (proficient), Java (familiar), C++ (familiar), C (familiar), SQL (familiar)
- Tensorflow, Keras, PyTorch, Scikit-Learn, OpenCV