

Sheikh Shams Azam

<https://machinelearningmedium.com/about/>

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EDUCATION

- **Purdue University** West Lafayette, IN
M.S. in Electrical and Computer Engineering (Specialization in AI); August 2019 – Present
- **National Institute of Technology Karnataka (NITK)** Surathkal, India
B.Tech in Electrical and Electronics Engineering; July 2011 – May 2015

PUBLICATIONS

- **CASCADENET: An LSTM-Based Deep Learning Model for Automated ICD-10 Coding**
FICC-2019; ICSWNL-2018
 - **Abstract:** Hierarchical NN architecture for classification of medical text among massively categorical ICD-10 codes
- **Q-Map: Clinical Concept Mining from Clinical Documents**
ICSWNL-2018; BAICONF-IIMB-2018
 - **Abstract:** A medical concept mining system running UMLS Metathesaurus concept search on clinical free text.

MACHINE LEARNING EXPERIENCE

- **Privacy preserving generative adversarial learning models**
Graduate Research Assistant, Purdue University, West Lafayette, IN Fall 2019
 - **Abstract:** GAN architecture for private representations while maintaining predictivity of datasets.
- **Link Prediction in Social Learning Networks**
Grad Project, Purdue University, West Lafayette, IN Fall 2019
 - **Abstract:** Deep learning based prediction of unformed links in social learning networks for recommendations.
- **Document Analysis and Optical Character Recognition**
Research Scientist, Foundation AI, Los Angeles, CA September 2018 - August 2019
 - **Abstract:** Development of pipelining methods like scene text detection, conditional GANs, CNNs for recognition
- **Smart Offers Recommendation** Bangalore, India
Machine Learning Intern, Simple Wealth, Bangalore, India December 2015
 - **Abstract:** Classification for offer recommendations based on popularity, user interests and geolocation.

FULL-STACK DEVELOPMENT AND DEVOPS EXPERIENCE

- **Secure Containerization**
Research Scientist, Los Angeles, CA September 2018 - August 2019
 - **Abstract:** Standardization of containerization and distribution of services using micro-service architecture with API interfaces and secure communications using dockerized dynamic SSL layer
- **Optimizing Index Searches and Secure URL Discoveries**
Data Scientist, Senior Software Engineer, Software Engineer, Practo, Bangalore, India June 2015 - August 2018
 - Scalable system for faster search and intelligent suggestions reliant on data driven adaptive ranking.
 - Web server level Url Discovery and Redirection System for preventing web traffic overload on application.

COMPETITIONS AND PROJECTS

- **Machine Learning Medium:** Author of Machine Learning Medium (<https://machinelearningmedium.com>), an educational website, deployed and maintained on github pages using Jekyll and hosted on CloudFlare
- **Kaggle: Data Science Bowl 2017:** Among top 13% in Kaggle Data Science Bowl, 2017. Developed a machine learning classifier based on ResNet using 3D convolution for classification of malignancy of lung nodules from 3D CT Scans
- **HackerEarth, IndiaHacks 2017:** Secured rank 18 among several thousand participants at IndiaHacks Challenge, 2017 organized by HackerEarth for solving real world classification problems of HERE maps and Hotstar