ISHAN KHANDELWAL

799 Royal St. George Dr. Apt 408 Naperville, IL 60563
(718) 755-8864 ◇ ishan.khandelwal@columbia.edu ◇ www.linkedin.com/in/ish23

EDUCATION

Columbia University, New York, NY *Aug 2018 - Dec 2019*
M.S in Computer Science
Relevant Courses: Machine Learning, Deep Learning, Computer Vision, NLP, Algorithms, Cloud Computing

Vellore Institute of Technology, Vellore, India *Jul 2013 - May 2017*
B.Tech in Computer Science
Relevant Courses: Probability, Statistics, Artificial Intelligence, Data Mining, Database Systems, Data Structures

TECHNICAL SKILLS

Domain and Interests	Machine Learning, Deep Learning, Computer Vision, NLP, Cloud Computing
Languages and Frameworks	Python, Tensorflow, SQL, C, C++, Java, MATLAB, AWS, Android Studio

EXPERIENCE

Tempus Labs (working on contract through Egen Solutions), Chicago, IL *Mar 2020 - Present*
Software Developer
- Developing ETL (Extract, Transform, Load) Data Pipelines at Tempus Labs using a cloud-native Tech stack.
- Automating Data Processing using SQL, Docker, and AWS services such as S3, Redshift, Lambda, and Batch to create robust and scalable software capable of triggering and monitoring the Data Pipelines.
- Responsible for ingesting, triggering, monitoring, and validating pipeline workflows using services such as AWS Batch, Cloudwatch, and Splunk.

Indian Institute of Technology, Delhi, India *Jul 2017 - Jan 2018*
Machine Learning Intern
- Designed a deep learning solution for bone age assessment using Tensorflow.
- Developed a preprocessing module to generate masks by segmentation of X-ray images of hands.
- Utilized a variety of data augmentation techniques to prevent overfitting and improve the resiliency of the system.
- Reduced the prediction time from 5 minutes to less than 3 seconds with 89% accuracy.

Clues Network Private Limited, Gurugram, India *Dec 2016 - Jan 2017*
Software Engineering Intern
- Facilitated the incorporation of chatbots into the Shopclues android shopping app to enhance the seller-buyer interaction.
- Used Google's Firebase API for real-time parsing of JSON data on cloud.

PROJECTS AND PUBLICATIONS

Detection of Cancer Metastases in Pathology Images *Feb 2019 - May 2019*
- Developed a framework for detection of breast cancer tumors present in pathology images.
- Designed a custom multi-input deep neural network to accept multiple zoom levels of a pathology image as input.
- Adopted transfer learning to train the model on Google Cloud Platform and achieved 98% test accuracy and 96% F1 score.

Virtual Grocery Store Assistant *Sep 2018 - Jan 2019*
- Developed a cloud-based mobile application which analyzes a user's buying patterns to recommend groceries.
- Created a custom RESTful API using Amazon AWS services such as Rekognition, Lambda, Cognito, S3 and Lex.

Face Recognition using Neural Networks *Jan 2017 - May 2017*
- Developed a hybrid system for face recognition using artificial neural networks on MATLAB with 95% test accuracy.
- Used PCA algorithm in conjunction with Neural Networks to reduce redundancy in input data resulting in higher accuracy.

Hybrid Techniques in Text Mining and Analysis of Social Networks Media Data *Oct 2016 - Aug 2017*
DOI: 10.1007/978-3-319-65139-2_1 (Springer HICS)
- Did a detailed analysis of all hybrid and traditional text mining techniques used for analysis of social media and network data.

Comparative Analysis of Data Mining Tools Using Supervised Learning Algorithms *Jan 2017 - Jun 2017*
DOI: 10.1007/978-3-319-60618-7_11 (Springer AISC)
- Research providing a comparative analysis of data mining tools used by various supervised learning algorithms.