Udit Arora

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New York, NY

Delhi. India

EDUCATION

Courant Institute of Mathematical Sciences, New York University

Master of Science in Computer Science

Jan 2020 - Dec 2021

Netaji Subhas Institute of Technology, University of Delhi

Bachelor of Engineering in Computer Engineering; CGPA: 8.04/10.0

Aug 2012 - May 2016

EXPERIENCE

Product Labs, IIIT Hyderabad

Research Engineer

Hyderabad, India

Jul 2019 - Dec 2019

- Implemented a pipeline for object detection and tracking in thermal images.
- Developed an end-to-end system for crowd-sourced speech data collection and transcription for 22 Indian languages.
- Product engineering and architecture for a badminton player tracking product used by Star Sports and a document chatbot used by SBI (India's largest bank) and others.

Laboratory for Computational Social Systems, IIIT Delhi

Delhi, India

Research Associate

Aug 2018 - July 2019

- o User, content and action level detection of blackmarket-driven collusion for gaining inorganic appraisals on Twitter using different embedding methods.
- Multimodal text summarization for educational content using hierarchical attention.

Microsoft

Hyderabad, India

Jun 2016 - July 2018

Software Engineer

- Excel: Developed innovative ways of sharing Excel content and integration of Excel with a messaging app. Filed a patent with the USPTO for the same.
- o Kaizala: Worked on a time-driven release of Kaizala UWP. Developed the Chat Page and workflows like heterogeneous message views and custom cards.
- Skype for Business: Developed the Cloud Call Analytics feature for Skype for Business Server 2019, building a secure pipeline to upload call telemetry data to the cloud.
- Hackathon: Winner of the OneWeek 2017 company-wide hackathon in Rajesh Jha's executive challenge developed a utility to scan and analyze receipts in Excel.

Projects

- Automated Cricket Umpire: A computer vision project to make cricket umpiring decisions like Wide/No Ball and LBW from a single smartphone camera feed using a ball tracking mechanism. (git.io/cricketbtp)
- Guidance System for Visually Impaired: A computer vision project to assist the visually impaired by using contour detection and Haar Classifier on a Raspberry Pi to detect zebra crossings and crosswalks. (goo.gl/adZ4Hf)
- OS Algorithm Visualization App: A desktop/android app for visualizing various operating system algorithms (CPU Scheduling, Page Replacement, etc.) - developed using Kivy framework in Python. (git.io/osava)
- Chain Reaction Single Player: A variant of Chain Reaction game for Android with an option to play against AI CPU bots, and integration of Google Play Game Services - 9000+ downloads. (ncrwebsite-1033.appspot.com)
- NSIT Percentage Calculator: A web-based tool to enable NSIT students to calculate and analyze their overall percentage - used by over 20,000 students from NSIT. (nsitpercentage.appspot.com)

Publications

- Arora, U., Dutta, H., Joshi, B., Chetan, A., Chakraborty, T. (2020), Multitask Learning for Blackmarket Tweet Detection. ACM Transactions on Intelligent Systems and Technology (TIST), in press.
- Arora, U., Paka, W., Chakraborty, T. (2019), Multitask Learning for Blackmarket Tweet Detection. IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining (ASONAM), in press.
- Yadav, S., Chakraborty, P., Mittal, P., Arora, U. (2018), Children aged 6-24 months like to watch YouTube videos but could not learn anything from them. Acta Paediatrica, doi:10.1111/apa.14291

Programming Skills

• Languages: Python, Javascript, C/C++, C#, Java

Tools/Frameworks: PyTorch, Keras, Git, MySQL