

Anurag Arora

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EDUCATION

- **Stony Brook University** Aug. 2017 – Dec. 2018
 - Master of Science in Computer Science; **GPA: 4.00**
 - Member of Human Interaction Lab: Generative Adversarial Networks(GANs) and Deep Learning
 - Coursework: Computer Vision, Machine Learning, Big Data Analytics, AI, & Analysis of Algorithms
- **Indian Institute of Technology Mandi, India (IIT Mandi)** Jul. 2009 – Jun. 2013
 - *Bachelor of Technology in Computer Science and Engineering; GPA: 3.6 (Converted)*

EXPERIENCE

- **Microsoft India (Software Engineer)** Jul. 2013 - Jul. 2017
 - Cloud Solution Provider (CSP): Developed the customer's user UI functionality and Minecraft's license provision functionality in CSP. Implemented complete UI of customer's user creation, update, bulk update, license assignment, bulk license assignment, Minecraft's license assignment, and automatic custom left-menu generation. UI was responsive as well localized to support CSP in different regions around the globe. My work was crucial for the release of Minecraft's Education Edition & Windows 10 Enterprise. Got "Excellence Award" for my contribution in CSP.
 - Microsoft Quote: Developed complete custom duration UI of MSQuote, an enterprise commerce quoting application. I also refactored the back-end code to make custom duration and Quote generation configurable. Custom duration helps Microsoft's customer to order software and services for custom duration instead of a fixed period earlier.
 - Release Services: Reduced the downtime of servers by 30% by automating tasks for server's management.
 - Technologies used: *AngularJS 1.x/2.x, JavaScript, Python, HTML5, CSS3, C#, WebCore (Customized Bootstrap), Office UI Fabric, PowerShell, SQL, & Power BI.*
- **Intern**
 - **Microsoft India (Summer 2012)**: Developed a Windows app and website to show how NoSQL database can be used to overcome the bottleneck of scalability and manageability. Technologies used: *C#, HTML, CSS, & JavaScript.*
 - **Snow & Avalanche Study Establishment, India (Winter 2011)**: Designed an algorithm for 2-D reconstruction of a random heterogeneous media for early detection of an avalanche. Technologies used: *C++.*

SKILLS

- **Language/Libraries**: C++, Python, Ruby, C#, Spark, OpenCV, TensorFlow, Haskell
- **Web/Mobile**: AngularJS 1.X/2.X, Ruby on Rails, JavaScript, HTML5, CSS3, Bootstrap, Ionic Framework
- **Other**: Git, Visual Studio, VSTS, PostgreSQL, SQL, Redis, Azure VM, AWS IaaS, Sublime, Jupyter Notebook, Xcode

PERSONAL PROJECT

- **ClipMyStuff**: A social network for discovering, sharing, & managing bookmarks across multiple browsers & devices. User can also create groups and anonymous bookmarks. Developed its complete website, Android app, Chrome, & Firefox extension. Used Ruby on Rails, AngularJS 1.5, JavaScript, HTML5, CSS3, Ionic Framework, etc. Also took care of server management and deployment and data replication across multiple geolocations to prevent downtime and any loss of user's precious bookmarks.

ACADEMIC PROJECTS

- **GANs Research Project**: A convolution neural network based on BIO-GANs to generate single-channel images of yeast cell. Currently, trying to come with a novel method to generate segmentation masks along with the image for bio-medical data using Generative Adversarial Network. Technologies used: *DCGAN, Python 3, TensorFlow, & CUDA.*
- **Computer Vision**: Face detection and tracking using Viola-Jones, Optical Flow, Kalman Filter, and Particle Filter. Interface to segment foreground and background of an image using SLIC super-pixels and graph-cut and image panorama stitching using SIFT matching and blending the images using Laplacian pyramid. Technologies used: *Python 2.7, C++, & OpenCV.*
- **3D-Scanner**: 3-D scene reconstruction of an object by calculating depth map using multiple structured light scanning, projector-camera calibration, and stereo triangulation. Technologies used: *Python 2.7 & OpenCV.*
- **Infant Mortality, United Nations SDG 3.2**: Implemented a framework that can predict the risk of infant death and provide similar pregnancy cases for reference to aid the medical practitioners in taking informed decisions. Technologies used: *Python 3, Spark, Machine Learning, K-means clustering, Similarity search, & PCA.*
- **HiTech-Shoe**: Designed and developed a renewable source of energy that charges mobile phones while walking.
- **Cloud-Based Tourist Information System**: Developed website and Android app to provide and map real-time and on-site dynamic information about nearby archaeological sites and communities.