

Varun Belagali

Education

2016–2020 **Bachelor of Engineering**, *R V College of Engineering*, Bangalore, GPA - 9.22/10.
Computer Science and Engineering

Experience

- July 2020– **Software Engineer 1**, *Citrix R&D*, Bangalore.
Present Part of Citrix Cloud team. Developing Citrix Cloud and Identity Platforms
<https://docs.citrix.com/en-us/citrix-cloud.html>
- June 2018– **Research Intern**, *Spire Lab*, Indian Institute of Science, Bangalore.
Present Worked on automatic glottis localization and segmentation in stroboscopic videos
<https://spire.ee.iisc.ac.in/spire/glottis.php>
- Jan 2020– **Software Engineer Intern**, *Citrix R&D*, Bangalore.
June 2020 Worked on Azure Key Vault and Citrix Cloud services
- Aug 2019– **Student trainee, Samsung Prism Program**, *Samsung R&D Institute*, Bangalore.
Jan 2020 Worked on project : Answer by Bixby - Spam Detection

Publications

Journal

Varun Belagali, Achuth Rao M V, Pebbili Gopikishore, Rahul Krishnamurthy, and Prasanta Kumar Ghosh, "Two step convolutional neural network for automatic glottis localization and segmentation in stroboscopic videos", published in Biomedical Optics Express 11.8 (2020): 4695-4713. <https://doi.org/10.1364/B0E.396252>

Projects

- **Automatic glottis localization and segmentation in stroboscopic videos**
 - Applied CNN-based models to quantify the minimal glottal opening area from stroboscopic video recording of patients suffering with voice disorders to assist Speech Language Pathologists in tracking the voice therapy.
 - The proposed model beats the baseline by 24.64% in terms of localization accuracy and by 0.26 in terms of dice score.
 - Developed application in python with UI for annotation of the data by doctors, to visualize the glottal regions predicted by CNN model, and to correct the glottis boundary of incorrect predictions.

- **Answer by Bixby - Spam Detection**

- Used combination of CNN and LSTM models to detect spam calls received by Samsung Voice Assistant Bixby.
- Earned Certificate of Excellence for the work

- **Automatic Geo Failover of Citrix Cloud Services**

- Developed a traffic manager platform using C# and Azure that routes requests from various regions to specific regional data centers to minimize turnaround time.
- The platform routes traffic only to healthy geo regions which results in minimal impact on global services during a regional cloud outage

Course Work

Discrete Mathematics, Graph and Probability Theory , Compiler Design, Artificial Neural Networks, Computer Vision, Advanced Linear Algebra, Data Science and Machine Learning Essentials

Transcript-link

Interests

- Machine Learning, Deep learning
- Computer Vision

Languages and Technologies

Languages C, Python, Java, Matlab, C#

ML libraries Keras, Tensorflow, OpenCV, Scikit learn

Technologies Azure, Jenkins, Splunk, NewRelic

Awards and Certificates

- Certificate of Excellence - Samsung Prism - *link*
- Dr. A. P. J Abdul Kalam Award for Excellence in Science 2016

Online Courses

- Machine Learning, Coursera - *link*
 - Supervised learning, Unsupervised learning, Best practices in machine learning
- Deep Learning Specialization (5 courses) - Deeplearning.ai ,Coursera - *link*
 - Neural Networks and Deep Learning
 - Hyperparameter Tuning, Regularization and Optimization
 - Structuring Machine Learning Projects
 - Convolutional Neural Networks
 - Sequence Models

Hobbies

- Badminton
- Cycling