# Saketh Bachu

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## Experience

# SimpleWorks Solutions Pvt. Ltd | Deep Learning Intern May 2019 - Oct 2019 | Nagpur, India

- Built the Face-Liveness Detector using a CNN called the liveness-net.
- Optimized it using facial heuristic movement detection to make the e-kyc application process simpler and more secured.
- The model classified liveness with an accuracy of 90% on the developer set.

#### IvLabs | Member

July 2019 - Present | VNIT, Nagpur

- Part of the community working on deep learning to solve various real-life scenario problems.
- Developed a deeper understanding on the cutting edge technologies used in deep learning and computer vision and worked on various interesting projects along with other members.

### **Projects**

### Covid19-Outbreak and NPI-prediction [code]

May 2020 - June 2020 | VNIT, Nagpur

- Lead the development of **Coronaob.ai**, a machine learning pipeline to predict mitigation measures for a pandemic outbreak.
- It is built with the help of machine learning algorithms and statistical methods. This model helps in forecasting the number of covid19 cases and also predicts mitigation measures to control the outbreak.
- Bagged the third position at the reinventhacks corona hackathon and also presented the project at "The international conference on future engineering - 2020".

### Stair pose estimation using UNET [code]

June 2020 - Present | IvLabs, VNIT

- To build a deep learning pipeline to predict the pose of a staircase using semantic segmentation by estimating the vanishing points on RGB images.
- UNet is being used to accomplish this task and the best F2 score we obtained is 0.72.

# Predicting customer churn in banking using ANN [code] June 2020 – July 2020 | VNIT, Nagpur

- Aimed at predicting the churn rate based on some characteristic properties like previous transactions, age, etc.
- Achieved a test set accuracy of 84.2%.

### Bubble sheet scanner using OMR and OpenCV [code]

Aug 2020 - Sept 2020 | VNIT, Nagpur

- Designed an bubble sheet scanner and test grader using OMR for a nation-wide examination.
- It was based on techniques such as contour sorting, perspective transforms, etc.

### **Education**

# Visvesvaraya National Institute of Technology, Nagpur

BTECH, METALLURGY AND MATERIALS ENGINEERING Expected May 2022 | Nagpur, India CGPA: 8.69 / 10.0 (Until 4th semester)

# Sri Chaitanya Group of Institutions

HIGHER SECONDARY SCHOOL April 2018 | Hyderabad, India Public examination Score: 982 / 1000

### Bhavan's Sri Rama Krishna Vidyalaya

SECONDARY SCHOOL May 2016 | Hyderabad, India Board examination CGPA: 10.0 / 10.0

### Skills

### **Programming**

Python • C/C++ • HTML/CSS • Java

#### **Technology**

TensorFlowV2 • PyTorch • Keras Git/Github • Linux • Firebase OpenCV

### Coursework

#### Undergraduate

Neural Networks & Deep Learning Improving Deep Neural Networks Structuring Machine Learning Projects Convolutional Neural Networks Numerical Methods & Computation Data Structures in C Mathematics for ML: PCA Introduction to Linear Algebra Probabilistic Systems Analysis and Applied Probability

### Links

Github: sakethbachu LinkedIn: Saketh Bachu