## B VINEETH RAJ

Gender: Male

Date of Birth: 30/09/1999 Email: vineebala99@gmail.com Contact: +91-8072761849



**Educational Qualifications:** 

Year	Degree/Examination	Institution/Board	CGPA/Perce ntage
2017- 2021	B.Tech Electronics and Communication Engineering	NIT Trichy	6.36
2017	Class XII	Velammal Matric Higher Secondary School Panchetti	94.58%
2015	Class X	Velammal Matric Higher Secondary School Panchetti	99%

### **Academic Achievements:**

- Winner of Software Domain in TransfiNITT 2020, an annual Intra NITT
- Hackathon.
  Bagged 67<sup>th</sup> place(out of 2.5k people) in the Pulmonary Fibrosis Progression competition(a deep learning competition) held by Open Source Imaging Consortium(OSIC) in Kaggle.
- Completed Udacity's Intro to Machine Learning and Machine Learning Engineer course and got a certificate.
- Cleared Regional Maths Olympiad(RMO) and appeared for Indian National Mathematics Olympiad(INMO) conducted by Homi Bhaba Centre Of School Education(HBCSE)
  Secured an AIR-11 in International Olympiad Of Mathematics conducted in 2010
- by SilverZone Foundation
- Secured an AIR-54 in Student Talent Reward Test(START) conducted by Resonance in 2011.
- Secured a State Rank Of 9 in International Olympiad Of Science conducted in 2011 by SilverZone Foundation.
- Participated in South Indian Maths Olympiad (SIMO) and South Indian Science Olympiad(SISO) final level conducted by SIMO Education in 2011, 2012, 2013, 2014 and got a certificate for Exceptional and Outstanding performance.
- Participated in National Level State Science Talent Examination(NSTSE) conducted by Unified Council in 2013 and 2014 and got a certificate and very good performance.

# Work Experience

Associate Solutions Architect at IHS Markit

July 2021-Mar 2022

- Worked with the Counterparty Manager-Onboarding Accelerator. Worked on the backend side with java and spring.
- **Software Engineer**

May 2022-Apr 2023

- Worked on the backend with Java, Springboot, Angular.
- Devloped a crud based full stack application using Springboot and Angular (Explained much about this in the project section)

# **Project Work/Internship Experience:**

- **Summer Internship at Botter Solutions Pvt. Ltd.** May 2020-June 2020
  - o Made an Instagram Influencer Recommender System.

- Scraped data from public profiles under various categories like Fashion. Food, Travel, etc..
- Then we analysed each profile and we also checked the posts and analyzed whether it was a deepfake or a real one using efficient-net models.
- We also analyzed the comments and checked whether it was a bot generated comment or a comment by a real person using transformers such as BERT and RoBERTA.
- Finally this data was given to the main recommender model which is a multi-criteria Colloborative Filtering Model and we got outstanding result and thus we made it look like a score card.

### OSIC - Pulmonary Challenge(blog published in analytics vidhya) Jul 2020-Oct 2020

- Predicted the Forced Vital Capacity(FVC) for a patient based on CT Scan of their lungs and metadata extracted from .dicom files.
   Instead of predicting the FVC directly we predicted the slope of FVC over a week and predicted the FVC from that slope with some random intercept value and this gave us the mean absolute error of 2.45
   The models we used are efficientnet-B5 for ct scan (computer vision) and ElasticNet, RidgeRegression for metadata which was trained for about 855 epochs and this ensemble gave us a competition score of -6.8487 landing in 67th place silver position.
   NFL Helmet-Impact Detection

- Detected the helmet impacts that occur in the field from the given videos.
- Firstly we classified and detected whether the image in the videos was helmet or the ball using yolov5 and efficientdet-d5

  Next we predicted whether the helmet was an impact or not i.e. whether 2
- helmets collided or not. This was done using yolov5, efficientdet- d5,d4.
- Finally these models were ensembled using weighted box fusion ensemble and we got a Post-Processor-Kernel-Desc score of 0.20

  Hospital Management Application Nov

Nov 2022-Nov2022

- O Developed a springboot microservice based application
- Used spring security and password hashing for login purposes
   Used SHA-256 hashing and salt for keeping password secure in MySQL database.
- Developed Frontend using Angular and Bootstrap
- Backend unit testing was done using junit
- Angular testing was done using jasmine karma

### **Skills**

- 1. **Programming Languages :** C, C++, Java, Python, R.
- 2. Engineering Softwares: Matlab, Proteus VSM, JupyterNotebook, Arduino IDE.
- 3. **Deep Learning Frameworks :** Tensorflow, Keras, PyTorch.
- 4. Java Frameworks: Spring, Springboot, Microservices, Eureka
- 5. FrontEnd Frameworks: Javascript, Typescript, Angular, React
- 6. **Big Data Tools:** Spark, Hadoop.
- 7. **Visualization Tools:** Matplotlib, Seaborn, Plotly, Dash.
- 8. Other Softwares: MS SQL, SqlServer, Postgresql.

### **Extracurricular Activities**

## **Sports Activites:**

- Runner up in Football under Junior Category conducted by Velammal Matric Higher Secondary School Panchetti for the annual sports day.
  Won inter school chess competition conducted in 2007 by School of Chess.
  Won TN State Level open chess championship conducted in 2007 by Kilpauk Chess Centre.

### Others:

- Kaggle 4x Expert(<u>kaggle profile</u>)
  My all medium articles published in Analytics Vidhya (<u>Medium profile</u>)
  <u>LinkedIn profile</u>, <u>Github-profile</u>