

# Bhavya Goel

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👑 (3 ☆) : [codechef.com/bgoel4132](https://www.codechef.com/bgoel4132)

🔗 (500+) : [leetcode.com/bgoel4132](https://leetcode.com/bgoel4132)

## EDUCATION

- **Vellore Institute of Technology** 📍 Vellore, India  
*Bachelor of Technology - Computer Science and Engineering; GPA: 8.93* 📅 Jul '19 - Present  
*Courses: Operating Systems, Data Structures and Algorithms, Machine Learning, Deep Learning, Networking, Databases*

## SKILLS SUMMARY

- **Languages:** Python, C/C++, Java, Go, JavaScript, SQL, Bash, Solidity
- **Frameworks:** TensorFlow, PyTorch, OpenCV, Scikit, NLTK, Keras, Django, Flask, NodeJS, Streamlit, React, HardHat
- **Tools:** Docker, GIT, MySQL, SQLite, WebODM, MongoDB, IPFS, Metamask
- **Soft Skills:** Leadership, Event Management, Writing, Public Speaking

## EXPERIENCE





- **Amazon ML Summer School** Remote  
*Apprenticeship* 📅 Jun '22 - Present
  - **Curriculum:** Probabilistic Graphical Models, Sequential Learning, Causal Inference, Reinforcement Learning, Dimensionality Reduction, Unsupervised Learning and more.
- **RBG Labs - IIT Madras** Remote  
*Research Intern (Full-time)* 📅 May '22 - Present
  - **Image Analysis:** Evaluating various modules and frameworks to optimise workflow, aiming to achieve an efficiency improvement by 40%.
  - **Development:** Developing Python back-end based navigation system using Google APIs.
- **Samsung R&D Bangalore** Remote  
*Research Intern (Part-time)* 📅 May '22 - Present
  - **Predictive Analysis and Modelling of web browsing data:** Formulating deep learning architecture to analyse browsing data in order to recommend URLs, auto categorise web pages, group tabs, for more than 4 diff. categories.
  - **Chrome Extension:** Improving architecture's accuracy (*approx. 95%*), to be integrated into chrome extension as data pipeline.
- **PixelVision** Remote  
*Data Science Intern (Part-time)* 📅 Nov '21 - Feb '22
  - **Developed Python Module:** Analysed GIS images of crops using existing tools and enhanced current functionality of FieldImageR into Python Library, with various additional features.
  - **Upgrades:** Revamped and customised existing WebODM tool, with payment gateway to access our enhanced features.

## PROJECTS

- **ArrhythmicECG: ECG based Disease Classification** 🔄  
*LSTM, Attention Model, PyTorch, Data Augmentation* 📅 Feb '21
  - Engineered algorithm for classifying 16 heart related diseases with novel roll-over technique for balancing dataset.
  - Achieved over 95% accuracy using dual-way deep neural network having LSTM and Attention Model.
- **RetinalOCT: OCT based disease Classifier** 🔄  
*Deep CNN, Bounding Box, PyTorch* 📅 Sept '21
  - Proposed algorithm for detecting 4 retinal diseases in real-time from OCT scan of eyes using deep CNN
  - Devised approach to predict bounding boxes from non-annotated dataset with an accuracy of 46%, hence enhancing efficiency of diagnosis.
- **GoRESTApi: Golang RESTful API for Instagram** 🔄  
*Go, GridFS, MongoDB, REST, Docker, Postman* 📅 Oct '21
  - Coded RESTful API in Golang, utilizing standard Go packages plus MongoDB and GridFS for data storage and authentication.
- **FutureAvengers : Time Series Air Quality Prediction** 🔄  
*Time Series, Neural Prophet, ARIMA, Streamlit* 📅 Dec '20
  - Forecasting pollution patterns for 10 contaminants in over 20 districts using Facebook's Prophet Network.
  - Engineered ensemble model to estimate pollution for 6 months.





## HONORS AND AWARDS

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- **Global Rank 19: Codechef Long Challenge**  JAN221C  
*Codechef*  Jan '22  
Scored 500 points out of 700, ranking 3rd in India, and 19th globally. Problems involved various mathematical intuitions from Series, XOR, and more. Also had questions about Segment Trees, Graphs, Maps, etc.
- **HealthTech Track Winner & Runner Up**   
*IETE-ISF, VIT & ACM, TIET*  Mar '21  
Using Random Forest Regressor, developed machine learning model to predict menstrual date based on numerous biological characteristics. Model predicts dates with accuracy of 75%.

## VOLUNTEER EXPERIENCE

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- **Technical Head**  
*IET - VIT*  Jan '21 - Jan '22  
Mentored technical team (70+ members) of IET-VIT and instituted Quantum Series. Led workshops (approx. 10) covering variety of topics from Data Science.  
Team's projects are available on . Additional information about IET-VIT is accessible at  [iet-vit.tech](https://iet-vit.tech)
- **Campus Ambassador**  
*Tezos India*  May '21 - Jan '22  
Directed student-led community (TDC, Vellore) and successfully organised 4 events, and mentored students over 10 different projects.