# SAI SAMARTH R PHAYE

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## EDUCATION

| Qualification | University | Institute | Year | Grade/% |
|---|---|---|---|---|
| B. Tech. | IIT Ropar | IIT Ropar | 2014-2018 | 7.28/10 |
| Intermediate/+2 | CBSE | HHEA Raipur | 2013-2014 | 91.6/100 |
| Matriculation | CBSE | HHEA Raipur | 2011-2012 | 9.6/10 |

## PUBLICATIONS

- **Sai Samarth R Phaye**, Emmanouil Benetos and Wang Ye. SubSpectralNet – Using Sub-Spectrogram based Convolutional Neural Networks for Acoustic Scene Classification. Submitted in *$14^{th}$ IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP) 2019* [arXiv] [GitHub]
- **Sai Samarth R Phaye***, Apoorva Sikka*, Abhinav Dhall and Deepti Bathula. Multi-level Dense Capsule Networks. Accepted in *$14^{th}$ Asian Conference on Computer Vision (ACCV2018), Perth, Australia*, 2 - 6 December 2018 [arXiv] [GitHub]
- **Sai Samarth R Phaye**, Love Mehta and Mukesh Saini. The One Man Show. Accepted in *$19^{th}$ IEEE International Symposium on Multimedia (ISM2017), Taichung, Taiwan*, 11 - 13 December 2017 [Paper]

## ACHIEVEMENTS

- Got selected for **Summer Research Program 2017** from students all over the world, which is an internship program at National Tsing Hua University, Taiwan.
- "**Hack In Punjab**" - **All India Level Hackathon Event** winner, organised by **Top Careers And You**, Sept'15.
- Secured a rank of **1662** (out of **1.3 million candidates)** in Joint Entrance Exam (JEE Mains and Advanced combined), 2014.

## KEY ACADEMIC PROJECTS

- **Optic Disc/Cup Segmentation and Glaucoma Classification** [Report] – *Medical Image Processing*
  *(Guide: Dr. Deepti Bathula, May - July'18)*
  – Proposed a **two-level deep learning system**, in which the first sub-network localizes the disc region in the original sample which is further used by finer network for segmentation of cup and disc.
  – **Qualified for on-site round** of REFUGE Challenge which was held at MICCAI, Spain in 2018. Co-authoring for the challenge review paper (will be submitted in **IEEE Transactions on Medical Imaging**).

## TECHNICAL SKILLS

- **Programming/Scripting Languages** - Python, C++, JAVA, JavaScript, jQuery, SQL
- **Deep Learning Libraries** - Keras, TensorFlow
- **Operating Systems** - Linux (Ubuntu), Windows
- **Tools** - Jupyter Notebook, MATLAB, Eclipse, LaTeX, Adobe Photoshop

## RELEVANT COURSEWORK

- Computer Vision, Multimedia Systems, Digital Image Processing, Computer Graphics, Database Systems, Data Structures, Computer Architecture, Discrete Mathematics, Probability Theory, Operating Systems

## OTHERS

- **Hashtags:** #ComputerVision #SoundAndMusicComputing #DeepLearning #MachineLearning #MultimediaProcessing #WebDevelopment #AndroidAppDevelopment #AlgorithmDevelopment #DataStructures
- **Internships:** Interned in University Paris-Est Marne-la-Vallée, Paris during the summers of 2016 and 2017.
- **Web-Designing:** Designed 4+ **official websites for IIT Ropar**, March'15 - April'15.
- **Strengths:** Good Teamwork, Good Communication Skills, Likes to Learn New Topics, Logical and Optimistic Approach.
- **When not doing research**, I am probably **composing music** or playing badminton.
- Member of Guitar Ensemble, National University of Singapore (**GENUS**).
- **Spoken Languages:** Fluent in English, Hindi; Beginner in French.

## REFERENCES

- **A/Prof. Wang Ye**, Associate Professor, School of Computing, National University of Singapore, Singapore
  - Contact: +65 (0) 8107 1462, wangye@comp.nus.edu.sg
- **Dr. Emmanouil Benetos**, Senior Lecturer, School of EECS of Queen Mary University of London, UK
  - Contact: +44 (0) 20 7882 6206, emmanouil.benetos@qmul.ac.uk
- **Dr. Deepti Bathula**, Assistant Professor, Indian Institute of Technology Ropar, India
  - Contact: +91 (0) 95011 96606, bathula@iitrpr.ac.in
- **Dr. Abhinav Dhall**, Assistant Professor, Indian Institute of Technology Ropar, India
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