

# Karan Taneja

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📁 [krtneja.github.io](https://github.com/krtneja)

**Research Interests:** Natural Language Processing, Knowledge-based AI, Machine Learning, Machine Teaching.

## Education

- **Georgia Institute of Technology** Atlanta, US  
Ph.D. in Computer Science, Advisor: Prof. Ashok Goel Jan'21 – Present
- **IIT Bombay** Mumbai, India  
Dual Degree (BS+MS) in Electrical Engineering, Minor in Computer Science Jul'15 – Jun'20

## Publications

- **A Bayesian Deep CNN Framework for Reconstructing k-t-Undersampled Resting-fMRI**  
Karan Taneja, Prachi H. Kulkarni, S. N. Merchant, Suyash P. Awate  
*International Conference on Pattern Recognition 2020 (Virtual), 10-15 Jan. 2021, Milan, Italy*
- **Improving Low Resource Code-switched ASR using Augmented Code-switched TTS**  
Yash Sharma, Basil Abraham, Karan Taneja, Preethi Jyothi  
*Interspeech 2020 (Virtual), 25-29 Oct. 2020, Shanghai, China*
- **Exploiting Monolingual Speech Corpora for Code-mixed Speech Recognition**  
Karan Taneja, Satarupa Guha, Preethi Jyothi, Basil Abraham  
*Interspeech 2019, 15-19 Sept. 2019, Graz, Austria*

## Research and Work Experience

- **Graduate Research Assistant** Atlanta, US  
Georgia Institute of Technology, Advisor: Prof. Ashok Goel May'21 – Present
- **Graduate Research Assistant** Mumbai, India  
Indian Institute of Technology Bombay, Advisors: Prof. Suyash Awate, Prof. Shabbir Merchant Jan'19 – Jun'20
- **Research Intern and Collaborator** Hyderabad, India  
Microsoft India Development Center in collaboration with  
Indian Institute of Technology Bombay, Advisor: Prof. Preethi Jyothi Oct'18 – Feb'20
- **Research Intern** Atsugi, Japan  
Sony Semiconductor Solutions May'18 – Jul'18
- **Undergraduate Research Assistant** Mumbai, India  
Indian Institute of Technology Bombay, Advisors: Prof. Preethi Jyothi, Prof. Sunita Sarawagi Jan'18 – May'18
- **Software Intern** Bangalore, India  
Philips Innovation Campus May'17 – Jul'17

## Coursework

<b>Machine Learning</b>	Machine Learning, Advanced Machine Learning, Reinforcement Learning, Graphical Models
<b>ML &amp; AI Applications</b>	Natural Language Processing, Knowledge-based AI, Speech Recognition, Computer Vision, Image Processing, Advanced Image Processing, Medical Imaging

## Technical Aptitude

<b>Programming</b>	Python, C/C++, Java, MATLAB/Octave, VHDL, Web Dev (HTML5, CSS3, JS)
<b>Packages</b>	PyTorch, TensorFlow, SciPy Stack, OpenCV, OpenGL, Django
<b>Other tools</b>	Bash Script, Vim, Jekyll, L <sup>A</sup> T <sub>E</sub> X, Eagle, Ngspice, Quartus, SolidWorks

## Awards

- **Undergraduate Research Award (URA03)** IIT Bombay  
Awarded to recognise exceptional work, in quality and extent, in the Dual Degree Project. 2020
- **Institute Academic Prize (IAP)** IIT Bombay  
Awarded with IAP for ranking 1<sup>st</sup> among 78 students in EE department for academic year 2018-19. 2018-2019