

# SNEHAL PRABHUDESAI

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Ph.D. Candidate | University of Michigan, Ann Arbor | snehalbp@umich.edu

## Research Interests

Medical Technologies promise to speed up diagnosis, reduce human labor and deliver better clinical outcomes. However, the direction of growth of these technologies is not in alignment with the needs of clinical end users. I investigate the nature and consequences of this gap and propose methods to support better interactions.

Areas: Human-Computer Interaction, Neuroradiology, Artificial Intelligence, Uncertainty Quantification.

## Education

**Ph.D., Computer Science and Engineering.** Jan 2020 - present

*University of Michigan, Ann Arbor, Michigan*

Advisors: Dr. Nikola Banovic (Computer Science and Engineering), Dr. Xun Huan (Mechanical Engineering), Dr. Arvind Rao (Computational Medicine and Bioinformatics)

**Master of Science, Electrical and Computer Engineering**

Aug 2018 - Dec 2019

*University of Michigan, Ann Arbor, Michigan*

**Bachelor of Technology, Electronics Engineering**

Aug 2014 - Aug 2018

*K. J. Somaiya College of Engineering, Mumbai, India*

*Thesis: Soil Quality Testing using Microcontroller*

## Related Work Experience

**Graduate Student Research Assistant**

Aug 2019 - present

*Computational HCI Lab, Computer Science and Engineering, University of Michigan*

Advisor: Dr. Nikola Banovic

*Uncertainty Quantification & Scientific Machine Learning Group, University of Michigan*

Advisor: Dr. Xun Huan

*Systems Imaging and Bioinformatics Lab, Michigan Medicine*

Advisor: Dr. Arvind Rao

**Research Assistant** May 2019 - Jul 2019  
*Biologically Inspired Robotics and Dynamical Systems Lab, University of Michigan*  
Advisor: Dr. Shai Revzen

**Wet Lab Researcher** Mar 2019 - Jul 2019  
*Mechanical Engineering, University of Michigan*  
Advisor: Dr. Eleni Gorgou

**Research and Development Intern, Microcontrollers** Oct 2017 - Aug 2018  
*Eduprime Technologies Pvt. Ltd., Mumbai, India*

## Publications

**Snehal Prabhudesai**, Nicholas Chandler Wang, Vinayak Ahluwalia, Xun Huan, Jayapalli Rajiv Bapuraj, Nikola Banovic, Arvind Rao. (2021) Stratification by Tumor Grade Groups in a Holistic Evaluation of Machine Learning for Brain Tumor Segmentation. Frontiers in Neuroscience. 15:740353. doi: [10.3389/fnins.2021.740353](https://doi.org/10.3389/fnins.2021.740353)

## Mentoring

Leyao (Hannah) Yang, University of Michigan (Undergraduate) May 2021 - present

Vinayak Ahluwalia, University of Michigan (Undergraduate) Mar 2020 – Aug 2020  
(Now an MD candidate at the Perelman School of Medicine at the University of Pennsylvania)

Dingkun Guo, University of Michigan (Undergraduate) Aug 2019 - Dec 2019  
(Now a Master's student in Robotics at Carnegie Mellon University)

## Community Outreach

**Event Moderator** 2018  
Moderated an event to foster interest in robotics for school kids aged 8-12 years

## Societies and Organizations

Board Member, ECSEL+, University of Michigan. 2021

Member, GoSTEM, University of Michigan

2021

Magazine Editor, EESA, K.J. Somaiya College of Engineering, Mumbai, India

2016-2018