Siddharth

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EDUCATION

UNIVERSITY OF CALIFORNIA SAN DIEGO
Ph.D. in Electrical Engineering (Intelligent Systems, Robotics, and Control)
June 2020 | San Diego, CA, USA

UNIVERSITY OF CALIFORNIA SAN DIEGO
M.S. in Electrical Engineering (Intelligent Systems, Robotics, and Control)
March 2017 | San Diego, CA, USA

INDIAN INSTITUTE OF INFORMATION TECHNOLOGY ALLAHABAD
B.Tech in Electronics and Communication Engineering
June 2015 | Prayagraj, UP, India

WEB LINKS

Website: **http://bit.ly/3WxttS7**
LinkedIn: **https://bit.ly/3XMBQLj**
Google Scholar: **http://bit.ly/3Wzb07P**

AREAS OF INTEREST

Artificial Intelligence
Machine Learning
Human Factors
Computer Vision
Bio-sensing
Affective Computing
Computational Neuroscience

SKILLS

Programming Languages
Python • MATLAB • C\C++
Frameworks
Tensorflow/Keras • PyTorch • Git • OpenCV• NumPy • SciPy • Scikit-learn
Hardware
PCB design and bring-up • EAGLE • Various embedded system and sensor platforms

WORK EXPERIENCE

MICROSOFT | Senior Machine Learning Engineer
Nov 2022 – Present | Redmond, WA, USA
- Leading the Human Factors group's efforts to design personalized user experiences to increase users' productivity.
- Analyzing how humans behave in Extended Reality (XR) to design immersive avatars, reduce motion sickness, and increase productivity.

MICROSOFT | Machine Learning Researcher
July 2020 – Nov 2022 | Redmond, WA, USA
- Used neurophysiology to assess user emotion and subjective experiences for increasing productivity in hybrid work settings.

FACEBOOK REALITY LABS | Research Intern
June 2019 - Sep 2019 | Redmond, WA, USA
- Utilized ML to assess the likeability of diverse content in XR.

FACEBOOK REALITY LABS | Research Intern
June 2018 - Sep 2018 | Redmond, WA, USA
- Utilized ML and bio-sensing for assessing users' cognitive load in XR.

SAMSUNG RESEARCH AMERICA | Research Intern
Jan 2015 - June 2015 | Mountain View, CA, USA
- Utilized EEG and ECG toward applications in human emotion detection.

SELECTED PUBLICATIONS

ON ASSESSING DRIVER AWARENESS OF SITUATIONAL CRITICALITIES
Brain Sciences, 2020

IMPACT OF AFFECTIVE MULTIMEDIA CONTENT ON THE ELECTROENCEPHALOGRAM AND FACIAL EXPRESSIONS
Nature Scientific Reports, 2019

UTILIZING DEEP LEARNING TOWARDS BIO-SENSING AND VISION-BASED AFFECTIVE COMPUTING
IEEE Transactions on Affective Computing, 2019

SELECTED PATENTS

PRESENTING BIO-SENSING DATA IN CONTEXT
US Patent App. 17/977,672

BIOSENSING AND EYE-TRACKING SYSTEM
US Patent 11,032,457

EMOTION EVALUATION
US Patent 10,285,634

SELECTED ADDITIONAL ACTIVITIES

Alumni Guest of Honor   IIIT Allahabad Global Alumni Meet 2022
Former Fellow Editor   Prospect Journal of International Affairs