SIDDHARTH

(Updated: October 11, 2021)

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EDUCATION

University of California San Diego (UC San Diego), CA, USA

Ph.D. in Electrical Engineering (Intelligent Systems, Robotics, and Control), 2020

M.S. in Electrical Engineering (Intelligent Systems, Robotics, and Control), 2017

Indian Institute of Information Technology (IIIT), Allahabad, India

B.Tech. in Electronics and Communications Engineering, 2015

WORK EXPERIENCE

Human-centered Machine Learning Researcher, Microsoft Human Factors Lab, Redmond, USA (Oct 2021 – present)
User Research Specialist, Human Factors Engineering Lab, Microsoft, Redmond, USA (July 2020 – October 2021)
Graduate Researcher, Swartz Center for Computational Neuroscience, UC San Diego (Sep 2015 – June 2020)
Graduate Fellow Editor, Prospect Journal of International Affairs, UC San Diego (Sep 2019 – June 2020)
Senior Editor, Prospect Journal of International Affairs, UC San Diego (Jan 2019 – Aug 2019)
Graduate Student Member, South Asia Initiative, UC San Diego (Jan 2019 – June 2020)
Graduate Researcher, Computational Neurobiology Laboratory, Salk Institute (Sep 2015 – June 2020)
Graduate Researcher, Laboratory for Intelligent and Safe Automobiles, UC San Diego (Mar 2016 – June 2020)
Research Intern, Facebook Reality Labs (FRL), Facebook, Redmond, WA, USA (June – Sep 2019)
Research Intern, Facebook Reality Labs (FRL), Facebook, Redmond, WA, USA (June – Sep 2018)
Research Intern, Think Tank Team, Samsung Research America, Mountain View, CA, USA (Jan – June 2015)
Research Intern, French National Center for Scientific Research (CNRS), Montpellier, France (May – July 2014)
Research Intern, National University of Singapore (NUS), Singapore (May – July 2013)

FIELDS OF INTEREST

Artificial Intelligence, Bio-sensing, Computational Neuroscience, Affective Computing, Political Systems

SELECTED FELLOWSHIPS, HONORS, AND AWARDS

Facebook Reality Labs, Research Grant, 2019
University of California, Chancellor's Research Excellence Scholarship, 2018
Kavli Institute of Brain and Mind, Innovative Research Grant, 2018
National Science Foundation, NCS Program, Received funding as a Graduate Researcher, 2017
University of California, Chancellor's Research Excellence Scholarship, 2017
University of California, Center for Wearable Sensors Grant, 2017
University of California, Frontiers of Innovation Scholars Program Grant, 2017
University of California, Center for Wearable Sensors Grant, 2016
Army Research Lab, Collaborative Technology Alliances, Received funding as a Graduate Researcher, 2016
Indian Institute of Information Technology, Runner-up in the Student Project Contest at ACM-IITM, 2013

SELECTED PUBLICATIONS

Siddharth and Trivedi M., *On Assessing Driver Awareness of Situational Criticalities: Multi-modal Bio-sensing and Vision-based Analysis, Evaluations, and Insights*, Brain Sciences, 2020

Siddharth, Jung, T.P., and Sejnowski, T., *Impact of Affective Multimedia Content on the Electroencephalogram and Facial Expressions*, Nature Scientific Reports, 2019

Siddharth, Jung, T.P., and Sejnowski, T., *Utilizing Deep Learning Towards Multi-modal Bio-sensing and Vision-based Affective Computing*, IEEE Transactions on Affective Computing, 2019

Siddharth, Patel, A., Jung, T.P., and Sejnowski, T., *A Wearable Multi-modal Bio-sensing System Towards Real-world Applications*, IEEE Transactions on Biomedical Engineering, 2018

Siddharth and Trivedi, M., *Attention Monitoring and Hazard Assessment with Bio-Sensing and Vision: Empirical Analysis Utilizing CNNs on the KITTI Dataset*, IEEE Intelligent Vehicles Symposium (IV), 2019

PATENTS

Siddharth, Tzyy-Ping Jung, Terrence Sejnowski, *Biosensing and Eye-Tracking System*, US Patent 11,032,457

Siddharth, Aashish Patel, Tzyy-Ping Jung, and Terrence Sejnowski, *Wearable Multi-modal Bio-sensing System*, US Patent App. 17/068,824

Jawahar Jain, Siddharth, Sajid Sadi, Pranav Mistry, *Emotion Evaluation*, US Patent 10,285,634

Siddharth, R. C. Tripathi, and M. D. Tiwari, *A Method and Apparatus for Similarity Detection of Documents Based on Contents Including Texts, Tables, Flowcharts and Equations*, Indian Patent Application ref. no. 160/DEL/2014

RESEARCH IN PROGRESS

Assessing the relationship between emotion elicitation and detection from the bio-sensing perspective.

Conducting experiments utilizing bio-sensing and machine learning for real-world applications.

PROFESSIONAL ACTIVITIES

Books

Published the book *Founding Generations: Democracy's Origins and Parallels in America and India* on the founding fathers and origins of Democracy in India and the United States of America.

Presentations/Talks

2021: Invited to a talk at the AICTE Faculty Development Programme at the Malnad College of Engg.

2020: Invited to an online discussion and talk at IIIT Allahabad Alumni Meet

2018: Invited to present graduate research (by video conferencing) at Human-Computer Interaction International Conference Workshop, IIIT Allahabad

2018: Presented graduate research at IEEE EMBC 2018 Conference, Honolulu, Hawaii

2018: Presented graduate research at the 7th BCI Meeting, Asilomar, CA

2017: Invited to present a talk on the topic "North Korea on the brink: Socio-Political Impacts of a Nuclear North Korea", Osher Lifelong Learning Institute, UC San Diego

2017: Presented graduate research at HCII Conference, Vancouver, Canada

2017: Presented graduate research at the UC San Diego Center for Wearable Computing Summit

2017: Invited to present an alumnus talk at IIIT Allahabad

2016: Presented graduate research at Society for Neuroscience (SfN) Conference 2016, San Diego, CA

2016: Invited to present an alumnus talk at IIIT Allahabad

Reviewer Service

IEEE PAMI, IEEE Transactions on Human-Machine Systems, MIT Press Neural Computation, ACM CHI Conference, IEEE Transactions on Affective Computing, IEEE Access, AffectiCom'21

OTHER INFORMATION

Citizenship: India

Date of Birth: April 11, 1993