KULBHUSHAN CHAND

Senior Project Scientist
Indian Institute of Technology Mandi,
HP, India – 175075

Institute Email: *kulbhushan_chand@projects.iitmandi.ac.in*
Persistent Email: *kulbhushan.chand@gmail.com*
Website: *kulbhushanchand.github.io*

I am an interdisciplinary researcher working at the intersection of human-computer interaction, extended reality, physiological computing, wearable sensing, and intelligent interactive systems. My research focuses on the design and development of biofeedback technologies, immersive virtual environments, and multimodal interaction techniques for applications in healthcare, disaster resilience, human performance, and assistive technologies. My teaching emphasizes project-based and research-oriented learning supported by interactive tools and open-source technologies.

EDUCATION

Ph.D., Electronics and Communication Engineering *2015 – 2022*
National Institute of Technology Jalandhar
Dissertation: Low Cost Multimodal Biofeedback for Mental Relaxation
Supervisor: Prof. Arun Khosla

M.Tech., Electronics and Communication Engineering *2011 – 2013*
Lovely Professional University
Dissertation: A New Approach for ECG Signal Denoising Using Adaptive Filtering
University Academic Honor (First in Order of Merit, First Division with Distinction)

B.Tech., Electronics and Communication Engineering *2006 – 2010*
Guru Nanak Dev University
Graduated with Honors (First Division)

ACADEMIC APPOINTMENTS

Senior Project Scientist *Feb 2026 – Present*
Centre for Climate Change and Disaster Management (C3DAR), Indian Institute of Technology Mandi
Project: Tata Trusts SAFER Hills – Augmented Facilities for Empowering Resilience in Himalayan Hills
Advisor: Prof. Varun Dutt

Postdoctoral Fellow *Nov 2022 – Feb 2026*
Technology Innovation Hub, Indian Institute of Technology Mandi
Project: Multisensory Human Computer Interaction and Biofeedback
Advisor: Prof. Varun Dutt

Predoctoral Fellow *Jun 2022 – Nov 2022*
Technology Innovation Hub, Indian Institute of Technology Mandi
Project: Multisensory Human Computer Interaction and Biofeedback
Advisor: Prof. Varun Dutt

Doctoral Researcher *Aug 2015 – Apr 2022*
Department of Electronics and Communication Engineering, National Institute of Technology Jalandhar

Teaching Assistant (Concurrent) *Aug 2015 – Jul 2020*
Department of Electronics and Communication Engineering, National Institute of Technology Jalandhar

Project Team Member (Concurrent) *Apr 2020 – Mar 2024*
ISRO Space Technology Incubation Center (S-TIC), National Institute of Technology Jalandhar
Project: Strengthening Ridge to Valley based NRM planning under Mission Water Conservation using Geospatially enabled Serious Gaming
Supervisor: Prof. Arun Khosla

Assistant Professor *Jul 2013 – Jul 2015*
Department of Electronics and Communication Engineering, Lovely Professional University

M.Tech. Researcher *Jul 2011 – Jun 2013*
Department of Electronics and Communication Engineering, Lovely Professional University

Teaching Assistant (Concurrent) *Jan 2012 – Nov 2012*
Department of Electronics and Communication Engineering, Lovely Professional University

Lecturer *Dec 2010 – May 2011*
Department of Electronics and Communication Engineering, Lovely Professional University

PUBLICATIONS (PEER-REVIEWED)

Journals (*corresponding author)

J.6 Kumar, Y., Garg, S., Agarwal, P., **Chand, K.**, Bhavsar, A., & Dutt, V*. (2026). Affordable ECG Sensing: A Machine Learning-Enhanced Framework for Scalable Human–Machine Interaction in Telehealth. IEEE Sensors Journal, 26(10), 14539–14546.

J.5 **Chand, K.***, Chandra, S., & Dutt, V.* (2024). Raga Bhairavi in virtual reality reduces stress-related psychophysiological markers. *Scientific Reports*, 14(1), 24816.

J.4 **Chand, K.***, Chandra, S., & Dutt, V.* (2024). A comprehensive evaluation of linear and non-linear HRV parameters between paced breathing and stressful mental state. *Heliyon*, 10(11), e32195

J.3 **Chand, K.***, & Khosla, A. (2022). BioNES: A plug-and-play MATLAB-based tool to use NES games for multimodal biofeedback. *SoftwareX*, 19, 101184.

J.2 **Chand, K.***, & Khosla, A. (2022). Efficacy of Using Retro Games in Multimodal Biofeedback Systems for Mental Relaxation. *International Journal of Gaming and Computer-Mediated Simulations (IJGCMS)*, 14(1), 1–23.

J.1 **Chand, K.***, & Khosla, A. (2022). MATLAB-Based Real-Time Data Acquisition Tool for Multimodal Biofeedback and Arduino-Based Instruments: Arduino Firmata Data Acquisition (AfDaq). *Journal of Information Technology Research (JITR)*, 15(1), 1–20.

Conferences - research papers (*corresponding author)

C.12 Katta, S. S., **Chand, K.***, Aggarwal, P., & Dutt, V.* (2026, October 22). Auditory Environmental Design and Executive Control: Evaluating Background Sound Effects on Interference Resolution in a Human–System Task. ASPIRE: the 69th HFES International Annual Meeting, Nevada, USA. [Accepted]

C.11 Sonam, S., **Chand, K.**, Mehra, A., Sharma, S., Meena, Y. K., Kaur, G., Rao, A. K., Govindaraji, R., Bhavsar, A., & Dutt, V.* (2026). Sensing and Modulating Autonomic State During a Virtual-Reality Combat Task: A Feasibility Study Toward Closed-Loop XR. NeuroXR 2026, Workshop at the IEEE International Symposium on Mixed and Augmented Reality (ISMAR 2026), Bari, Italy [Accepted]

C.10 Sharma, S., **Chand, K.**, Rao, A. K., & Dutt, V.* (2026). Validation-First NeuroXR: Immersive VR Spatial Navigation for Route-Memory Assessment Against the Groton Maze Learning Test. NeuroXR 2026, Workshop at the IEEE International Symposium on Mixed and Augmented Reality (ISMAR 2026), Bari, Italy [Accepted]

C.9 Agarwal, K., **Chand, K.***, Mehra, A., Uday, K. V., & Dutt, V.* (2026). Flash Flood Exposure and Localized Driving Control in Immersive VR: Evidence from Approach Speed, Braking, and Hazard-Zone Interaction. PRISM 2026. 1st International Conference on Pioneering Research in Intelligent Systems and Morphologies PRISM 2026. [In Press]

C.8 Mehra, A., **Chand, K.***, Uday, K. V., & Dutt, V.* (2026). Effects of Warning Reliability and Environmental Visibility on Driving Behavior and Physiological Stress in a VR-Based Landslide Hazard Simulation. Proceedings of the 19th International Conference on PErvasive Technologies Related to Assistive Environments. PETRA '26, Crete, Greece. [In Press]

C.7 Agarwal, K., **Chand, K.***, Mehra, A., Uday, K. V., & Dutt, V.* (2026). Rain-Induced Shifts in Driving Strategy on Flood-Prone Mountain Roads. Proceedings of the 19th International Conference on PErvasive Technologies Related to Assistive Environments. PETRA '26, Crete, Greece. [In Press]

C.6 **Chand, K.***, Mehra, A., Sonam, S., Tomar, K., Meena, Y. K., Kumar, A., Kaur, G., Rao, A. K., Govindaraji, R., Bhavsar, A., & Dutt, V.* (2026). Asymmetric Behavioral Adaptation from Initial Difficulty Exposure in a VR-Based Shooting Task. Proceedings of the 19th International Conference on PErvasive Technologies Related to Assistive Environments. PETRA '26, Crete, Greece. [In Press]

C.5 **Chand, K.***, & Dutt, V.* (2026). When Feedback Is Introduced Matters: Short-Term Effects of Biofeedback Sequencing in Stress-Sensitive Gameplay. Proceedings of the 19th International Conference on PErvasive Technologies Related to Assistive Environments. PETRA '26, Crete, Greece. [In Press]

C.4 **Chand, K.***, Khosla, A., & Dutt, V. (2026). Towards Affordable Biofeedback System for Mental Relaxation. In L. Behera, A. Bandyopadhyay, & G. Ramanath (Eds.), Cognitive Biomarkers and BCI Applications (pp. 248–269). Springer Nature Switzerland.

C.3 Soni, S., **Chand, K.**, & Chowdhury, S. R.* (2025). Development of a Wearable fNIRS System for Non-invasive Cerebral Oxygenation Monitoring. *6th International Conference on Frontiers in Computing and Systems (COMSYS 2025)*, Warsaw University of Technology, Poland. [In Press]

C.2 Chandra, S., **Chand, K.**, & Dutt, V.* (2023). Impact of Indian Classical Raga in Immersive Environments on Human Psycho-physiological Parameters. *Proceedings of the 16th International Conference on PErvasive Technologies Related to Assistive Environments. PETRA '23*, Corfu, Greece.

C.1 Rao, A. K., Fatma, Z., Menon, V. K., Bhavsar, A., Chowdhury, S. R., Chandra, S., Dutt, V.*, & **Chand, K.** (2023). Prediction of decision-making performance post-longitudinal tDCS administration via EEG features and machine learning. *Proceedings of the 16th International Conference on PErvasive Technologies Related to Assistive Environments. PETRA '23*, Corfu, Greece.

Conferences – posters & abstracts

P.3 Katta, S. S., **Chand, K.***, Aggarwal, P., & Dutt, V.* (2026, October 22). Auditory Environmental Design and Executive Control: Evaluating Background Sound Effects on Interference Resolution in a Human–System Task [Poster]. ASPIRE: the 69th HFES International Annual Meeting, Nevada, USA. [Accepted]

P.2 **Chand, K.***, Chandra, S., & Dutt, V. (2025). Raga Bhairavi in virtual reality reduces stress-related psychophysiological markers [Poster]. *Adani Global Indology Conclave*, Ahmedabad, India.

P.1 **Chand, K.***, Chandra, S., & Dutt, V. (2023). Effects of Relaxed and Stressful Mental States on the Heart Rate Variability Parameters [Abstract]. *Mind, Brain, and Consciousness Conference (MBCC 2023)*, IIT Mandi, India.

Book Chapters

B.4 Jain, B.*, Khosla, A., **Chand, K.**, & Ahuja, K. (2019). The Pursuit of Zero Food Waste: A Gamified Approach Promoting Avoidance of Dormitory Mess Food Wastage in Educational Institutions. In *Global Initiatives for Waste Reduction and Cutting Food Loss* (pp. 243–267). IGI Global.

B.3 Mukherjee, A.*, Goyal, P., Singh, A., Khosla, A. K., Ahuja, K., & **Chand, K.** (2019). Pursuit of Research: A Gamified Approach Promoting Research Engagement Among Undergraduate Students. In *Fostering Multiple Levels of Engagement in Higher Education Environments* (pp. 132–155). IGI Global.

B.2 Padmakar, G. S. V.*, Khosla, A., & **Chand, K.** (2019). LearnEasy-Android Application as a Technological Intervention for Children With Dyslexia. In *Emerging Trends in the Diagnosis and Intervention of Neurodevelopmental Disorders* (pp. 236–248). IGI Global.

B.1 Setia, D.*, Singh, R., Sharma, A., Khosla, A., Ahuja, K., & **Chand, K.** (2019). Enhancing Tourism and Cultural Experience Through Gamification. In *Positioning and Branding Tourism Destinations for Global Competitiveness* (pp. 152–171). IGI Global.

Manuscripts in Review

M.1 Mehra, A., **Chand, K.**, Rao, A. K., Gonsalves, T., Meyer, J., Uday, K., & Dutt, V.* (2026). An Analysis of Active vs. Passive Warning Cues in VR Landslide Driving [Manuscript in review].

Conference Presentations (Peer-Reviewed)

When Feedback Is Introduced Matters: Short-Term Effects of Biofeedback Sequencing in Stress-Sensitive Gameplay — *July 2026*
19th PErvasive Technologies Related to Assistive Environments (PETRA) 2026 | Crete, Greece

Raga Bhairavi in virtual reality reduces stress-related psychophysiological markers — *Nov 2025*
Adani Global Indology Conclave | Ahmedabad

Towards Affordable Biofeedback System for Mental Relaxation — *Jun 2025*
Mind, Brain, and Consciousness Conference (MBCC) 2025 | Indian Institute of Technology Mandi

Effects of Relaxed and Stressful Mental States on the Heart Rate Variability Parameters — *Dec 2023*
Mind, Brain, and Consciousness Conference (MBCC) 2023 | Indian Institute of Technology Mandi

Intellectual Property Rights

Patents

HRV based biofeedback device — *Dec 2025*
Status: Invention Disclosure Form submitted at Indian Institute of Technology Mandi
Description: An adaptive HRV based biofeedback device for mental stress management

Copyrights

Biofeedback Nintendo Entertainment System (BioNES) — *Aug 2025*
Registration No.: SW-2025021242 | Copyright Office, Government of India
Description: MATLAB-based framework for integrating NES games into multimodal biofeedback systems for mental wellness research.

Realtime arduino based HRV biofeedback system for mental stress assessment — *Aug 2025*
Registration No.: SW-2025021178 | Copyright Office, Government of India
Description: Arduino code for a low-cost HRV-based mental stress assessment device with real-time IBI acquisition, artifact correction, HR, RMSSD, SDNN, and stress percentage estimation.

Arduino Firmata Data Acquisition (AfDaq) — *Aug 2025*
Registration No.: SW-2025021174 | Copyright Office, Government of India
Description: Open-source MATLAB tool for real-time multichannel data acquisition and visualization from Arduino boards, used in biofeedback systems and device control.

MCP4251 — *Aug 2025*
Registration No.: SW-2025021177 | Copyright Office, Government of India
Description: Lightweight Arduino library for interfacing with MCP4251 digital potentiometer.

PROJECTS

Curricular Projects and Teaching Tools

Arduino Workshop for Kids E-Book — *2022*
National Institute of Technology Jalandhar

Gamification (ECX-488) Course E-Book, 3 Credits — *2021*
National Institute of Technology Jalandhar

Classroom Gamification, Software Tool, 3 Credits — *2018*
National Institute of Technology Jalandhar

Gamification (ECX-488), Course, 3 Credits — *2016*
National Institute of Technology Jalandhar

Open-Source Tools and Software

AfDaq: A plug and play MATLAB based tool for biofeedback and arduino based instruments — *2021*
https://github.com/kulbhushanchand/AfDaq

BioNES: A plug-and-play MATLAB based tool to use NES games for multimodal biofeedback — *2021*
https://github.com/kulbhushanchand/BioNES

MCP4251: Arduino library for MCP4251 Digital Potentiometer — *2021*
https://github.com/kulbhushanchand/MCP4251

classroom-gamification: Tool to gamify your classroom with an online leaderboard — *2018*
https://github.com/kulbhushanchand/classroom-gamification

INVITED TALKS / EXPERT LECTURES / WORKSHOPS

Invited Talks

Human Motivation and Engagement Analysis using Octalysis Gamification Framework — *Oct 2023*
5th Winter School on Cognitive Modeling – 2023 | Indian Institute of Technology Mandi

Human Motivation and Engagement Analysis using Octalysis Gamification Framework — *Oct 2022*
Winter School on Cognitive Modeling – 2022 | Indian Institute of Technology Mandi

Arduino and Open-Source Technologies — *Jun 2019*
DAV Institute of Engineering and Technology

Octalysis — *Nov 2020*
AICTE ATAL Sponsored Online Faculty Development Program on Gamification | National Institute of Technology Jalandhar

Expert Lectures

From Sensors to Systems: Building HRV-Based Biofeedback for Mental Health — *Apr 2026*
Guest Lecture for undergraduate students in School of Engineering Design and Automation-Engineering | GNA University

The Rhythm of the Heart: HRV, Autonomic Regulation, and Applications — *Apr 2026*
Guest Lecture for open elective course Music and Cognition (IK 515) in IKSMHA Center | Indian Institute of Technology Mandi

Octalysis Gamification Framework — *Oct 2025*
Guest Lecture for undergraduate course Gamification (ECOE-496) | National Institute of Technology Jalandhar

Octalysis Gamification Framework — *Feb 2023*
Guest Lecture for undergraduate course Gamification (ECOE-496) | National Institute of Technology Jalandhar

Octalysis Gamification Framework — *Sep 2022*
Guest Lecture for undergraduate course Gamification (ECX-488) | National Institute of Technology Jalandhar

Workshops

Arduino workshop for kids — *Nov 2017*
Jalandhar

RESEARCH FUNDING

On-Device Multimodal Sensing for Real-Time Training, Attention Regulation, and Performance Adaptation — *2026*
Qualcomm XR University Research Funding Program | Status: Under Review (Co-PI)

Motion-Seat XR for Landslide Decision-Making, Active Warnings, and On-Device Perception — *2026*
Qualcomm XR University Research Funding Program | Status: Under Review (Co-PI)

Immersive VR and Multimodal Sensing for EV Charging Cybersecurity Human Factors — *2026*
Qualcomm XR University Research Funding Program | Status: Under Review (Co-PI)

HONORS AND AWARDS

University Academic Honor (M.Tech. – First in Order of Merit, First Division with Distinction) — *2013*
Lovely Professional University

Graduated with Honors (B.Tech. – First Division) — *2010*
Guru Nanak Dev University

Competitive Qualifications

UGC-NET Qualified with JRF — *2013*
University Grants Commission

GATE-2013 Qualified — *2013*
Ministry of Education

GATE-2011 Qualified — *2011*
Ministry of Education

Academic Service

Mind, Brain, and Consciousness Conference (MBCC 2023) — *Dec 2023*
Indian Institute of Technology Mandi | Role: Workshop Organizer

Hackathon 2022 — *Jul 2022*
Indian Institute of Technology Mandi | Role: Jury member

Toycathon 2021 — *Jan 2021*
Ministry of Education | Role: Primary Evaluator

ATAL Online FDP on Gamification — *Nov 2020*
National Institute of Technology Jalandhar | Role: Assisted in conduction

GIAN Course on Autism and Assisted Technologies — *Dec 2018*
National Institute of Technology Jalandhar | Role: Assisted in conduction

Sports Meet – 2008 — *Sep 2008*
Guru Nanak Dev University | Role: Event Coordinator (Volleyball)

Media Coverage

Raga Bhairavi can lower stress levels: Study explores impact of Indian classical music — *Nov 2024*
The Telegraph India | Print and online newspaper

Young minds dwell on e-concepts — *Nov 2017*
The Tribune India | Print and online newspaper

Professional Development

Certifications

The Recreational UAS Safety Test (TRUST) — *Nov 2022*
Academy of Model Aeronautics

The Octalysis Framework - Level 1 — *Dec 2017*
The Octalysis Group

Conference (Attended)

Mind, Brain, and Consciousness Conference (MBCC 2025) — *Jun 2025*
Indian Institute of Technology Mandi

CHI 2025 — *Apr 2025*
Yokohama, Japan

Mind, Brain, and Consciousness Conference (MBCC 2023) — *Dec 2023*
Indian Institute of Technology Mandi

MOOC Courses (with certificates)

IITM – Finland – Certificate course on Mastering VR : Fundamentals to Practice — *Oct 2024*
Indian Institute of Technology Madras

DRONE01x: Drones for Agriculture: Prepare and Design Your Drone (UAV) Mission — *Sep 2022*
Wageningen University & Research

Statistics in Medicine — *Mar 2020*
Stanford University

Computer Science 101 — *Mar 2020*
Stanford University

Introduction to CAD: Learn Fusion 360 in 90 minutes — *Sep 2019*
Autodesk

Vital Signs: Understanding What the Body Is Telling Us — *May 2018*
University of Pennsylvania

Advanced MATLAB for Scientific Computing — *Dec 2017*
Stanford University

Introduction to Game Development — *Mar 2017*
Michigan State University

Calculus One — *May 2013*

The Ohio State University

Image and video processing — *Mar 2013*
Duke University

Short Term Courses/Workshops/Webinars (Attended)

Evaluating Impact Through Simulation & Games — *Aug 2025*
Shri Vaishnav Vidyapeeth Vishwavidyalaya

Learning from Simulations and Games: Guidance from Theory, Concept and Practice — *Nov 2024*
Shri Vaishnav Vidyapeeth Vishwavidyalaya

The Impact of AI on Gamification and Serious Games — *Sep 2024*
Shri Vaishnav Vidyapeeth Vishwavidyalaya

Development of Simulation Game, "Project PAL" using the SECI Model and Collaborative Learning Methods — *Jul 2024*
Shri Vaishnav Vidyapeeth Vishwavidyalaya

Hands on Training and Showcasing: High Density EEG Devices — *Mar 2024*
Indian Institute of Technology Mandi

Simulation Games: A Bridge between Knowledge and Behaviour — *Jan 2024*
Shri Vaishnav Vidyapeeth Vishwavidyalaya

Machine-Learning advances in Human-Computer Interaction — *Jul 2022*
Indian Institute of Technology Mandi

Innovation, IPR and Start-ups — *Jul 2022*
National Institute of Technology Jalandhar

LaTeX for Technical Writing — *June 2022*
Indian Institute of Technology Mandi

The Education Factory — *Sep 2020*
National Institute of Technology Jalandhar

Machine Learning Using Python — *Sep 2020*
National Institute of Technology Jalandhar

Computational Cardiac Engineering - Predictive Modelling and Innovative Sensing Systems — *Sep 2020*
Rajasthan Technical University

IP Commercialization & Technology Transfer — *Feb 2020*
National Institute of Technology Jalandhar

Recent Trends in Biomedical Signal Processing and VLSI Design — *May 2019*
National Institute of Technology Jalandhar

Data Science — *May 2019*
National Institute of Technology Jalandhar

Current Avenues of Research in Electronics and Communication Engineering — *Mar 2019*
National Institute of Technology Jalandhar

Autism and Assisted Technologies (Gian Course) — *Dec 2018*
National Institute of Technology Jalandhar

Brain Science & Technology: Tools and Techniques to understand the Human Brain — *Dec 2016*
Indian Institute of Technology Delhi

How to be your Child's Occupational therapist — *Sep 2016*
SOCH Educational Society

Biology for Engineers — *Jun 2016*
Indian Institute of Technology Bombay

Professional Membership

Association for Computing Machinery (ACM) — *Aug 2023 – Jul 2024; Feb 2026 – Jan 2031*
Professional Member

Institute for Systems and Technologies of Information, Control and Communication (INSTICC) — *Jan 2026 – Dec 2026*
Regular Member

Editorial and Peer Review Roles

Editorial Review Board Member

IGI Global: International Journal of Gaming and Computer-Mediated Simulations (IJGCMS); International Journal of Game-Based Learning (IJGBL); International Journal of Distance Education Technologies (IJDET)

Ad-Hoc Reviewer

Springer Nature: Discover Psychology; Signal, Image and Video Processing

Cell Press: iScience; Heliyon

Elsevier: Computers in Human Behavior Reports; SoftwareX; HardwareX; Biomedical Signal Processing and Control

Sage: Games for Health Journal

IGI Global: International Journal of Gaming and Computer-Mediated Simulations (IJGCMS); International Journal of Game-Based Learning (IJGBL); International Journal of Distance Education Technologies (IJDET)

ACM: BIOSIGNALS 2026, CHI 2025, CHI 2024

Industry Experience & Entrepreneurship

T4A Labs Pvt Ltd., Incubated in NITJ Technology Business Incubator — *Apr 2022 – Present*
Role: Co-Founder, Works on technologies for autistic kids and autism.

JCT Limited, Filament Unit, Hoshiarpur (Punjab) — *Jan 2010 – Jun 2010*
Role: Industrial Trainee

JCT Limited, Filament Unit, Hoshiarpur (Punjab) — *Jun 2008 – Jul 2008*
Role: Industrial Trainee

Skills

Programming: Assembly, C, C++, R, Lua, MATLAB, Python, Visual Basic, Pure Data

Applications: NI Multisim, KiCad, Unity3D, RStudio, JASP, Jamovi, Autodesk Fusion 360

Operating Systems: Windows, Ubuntu

Others: Octalysis Framework (Level 1 Certified), Physiological Signal Processing Analysis

Subjects Taught

Teaching Assistant (PhD Student) — *2015 – 2020*
National Institute of Technology Jalandhar

Gamification, ECX-488	*Spring 2020*
Scientific Computing Lab, ECPC-351	*Spring 2020*
Gamification, ECX-488	*Fall 2019*
Scientific Computing Lab, ECPC-351	*Fall 2019*
Gamification, ECX-488	*Spring 2019*
Electronics for Chemists Lab, CY-592	*Spring 2019*
Gamification, ECX-488	*Fall 2018*
Analysis and Synthesis of Networks Lab, ECX-211	*Fall 2018*
Gamification, ECX-488	*Spring 2018*
Electronics for Chemists Lab, EC-636	*Spring 2018*
Gamification, ECX-488	*Fall 2018*
Analysis and Synthesis of Networks, ECX-201	*Fall 2018*
Analysis and Synthesis of Networks Lab, ECX-211	*Fall 2018*
Gamification, ECX-488	*Spring 2017*
Basic Electronics Lab, ECX-102	*Spring 2017*
Gamification, ECX-488	*Fall 2016*
Analysis and Synthesis of Networks Lab, ECX-211	*Fall 2016*
Gamification, ECX-488	*Spring 2016*
Basic Electronics Lab, ECX-102	*Spring 2016*
Basic Electronics Lab, ECX-102	*Fall 2015*

Assistant Professor — *2013 – 2015*
Lovely Professional University

Digital Signal Processing, ECE300	*Spring 2015*
Digital Signal Processing Laboratory, ECE324	*Spring 2015*
Analytical Skills-II, PEA302	*Spring 2015*
Adaptive Signal Processing, ECE531	*Fall 2014*
Signal and Systems, ECE220	*Fall 2014*
Basic Simulation Laboratory, CSE222	*Fall 2014*
Electronic Devices and Circuits, ECE206	*Summer 2014*
Digital Signal Processing, ECE300	*Spring 2014*

Probability and Stochastic Processes, ECE256 *Spring 2014*
Digital Signal Processing Laboratory, ECE324 *Spring 2014*
Electronic Devices and Circuits, ECE206 *Fall 2013*
Basic Electrical Engineering, ECE133 *Fall 2013*
Analog and Linear Integrated Circuits Laboratory, ECE317 *Fall 2013*
Basic Electrical Engineering Laboratory, ECE134 *Fall 2013*

Teaching Assistant (MTech student) *2011 – 2013*
Lovely Professional University
Introduction to Practical Electronics, ECE100 *Fall 2012*
Electrical and Electronics Workshop, ECE130 *Spring 2012*

Lecturer *2010 – 2011*
Lovely Professional University
Microcontroller and Applications, ECE310 *Spring 2010*
Introduction to Practical Electronics, ECE100 *Spring 2010*
Unified Electronics Laboratory – II, ECE208 *Spring 2010*

Sports Activities

Annual Faculty Sports Meet – 100 mt. (Gold), 200 mt. (Gold) *2015*
Lovely Professional University
Annual Faculty Sports Meet – 200 mt. (Bronze), 400 mt. (Silver) *2014*
Lovely Professional University
Annual Faculty Sports Meet – 100 mt. (Gold) *2011*
Lovely Professional University

Languages

English – Proficient (Speak, Read, Write, Listen)
Hindi – Native-equivalent (Speak, Read, Write, Listen)
Punjabi – Native (Speak, Read, Write, Listen)

References

Prof. Varun Dutt
Professor, School of Computing and Electrical Engineering, Indian Institute of Technology Mandi, Mandi, Himachal Pradesh, India – 175075
varun@iitmandi.ac.in
Professional Engagement: Post Doctoral Advisor

Prof. Arun Khosla
Professor, Department of ECE, Dr B R Ambedkar National Institute of Technology, Jalandhar, India – 144011
khoslaak@nitj.ac.in
Professional Engagement: PhD Supervisor