

Ankit R. Patel | Curriculum Vitae

Rua Gaiteiro, 47, 2, Postal Code: 4835-052, Guimaraes, Portugal

☎ +351 934364312 • ✉ majorankit@gmail.com

🌐 www.majorankit.com

Sex: Male • Date of Birth: Monday 11 January, 1982 • Nationality: Indian

Research Interests

- Travel Behavior
- Society and Future Mobility
- Personalization and Human Factors

Education

Academic Qualifications.....

- **University of Minho** **Guimaraes, Portugal**
Ph.D. in Electronic and Computer Engineering *2017–Ongoing*
School of Engineering
ALGORITMI Research Center
Advisor: Prof. Estela Bicho
Co-Advisor: Prof. Sergio Monteiro
- **University of Mumbai** **Mumbai, India**
Master of Technology in Electrical Engineering , (Control Systems) *2009–2011*
Institute: Veermata Jijabai Technological Institute (VJTI), Mumbai
Thesis: Dynamics and Control of Biped
Advisor: Prof. D R Mehta
CPI: 7.8 on 10 scale
- **Hemchandracharya North Gujarat University** **Patan, India**
Bachelor of Engineering in Electrical , (Microprocessor & Microcontroller) *1999–2003*
Institute: Government Engineering College, Modasa
Percentage: 69%

Publications

Journal Articles.....

- Ankit R Patel, Ankit A Patel, Mahesh A Patel, and Dhaval R Vyas. "**Modeling and simulation of photovoltaic based LED lighting systems**" International Journal of Electrical and Computer

Engineering, Vol. 5, No. 1, pp. 75-79, 2011.

- o Mahesh A Patel, Ankit R Patel, Dhaval R Vyas, and Ketul M Patel. "**Use of PWM techniques for power quality improvement**" International Journal of Recent Trends in Engineering, Vol. 1(4), pp. 99-102, 2009.

Book Chapter.....

- o Ankit R Patel, Rajesh S Patel, Navdeep M Singh, and Faruk S Kazi. "**Vitality of robotics in healthcare industry: An Internet of Things (IoT) perspective**". Internet of Things and Big Data Technologies in Next Generation Healthcare, Springer, Germany, 2017, pp. 91-109.

Conference Papers.....

- o Ankit R Patel, Gargi Trivedi, Dhaval R Vyas, Adriana-Simona Mihaita, and Padmanaban Sanjeevikumar. "**Framework for user-centered access to electric charging facilities via energy-trading blockchain**" in 24th IEEE International Symposium on Wireless Personal Multimedia Communications (WPMC), Okayama, Japan, December 14-16, 2021, pp. 1-6.
- o Ankit R Patel, Flora Ferreira, Sergio Monteiro, Ana Carolina Silva, Wolfram Erlhagen, and Estela Bicho. "**Prediction of attitudes towards human-centred cognitive vehicles aware of their users' routines and preferences**" in 6th IEEE International Forum on Research and Technologies for Society and Industry (RTSI), Naples, Italy, September 6-9, 2021, pp. 194-199.
- o Ankit R Patel, Flora Ferreira, Sergio Monteiro, and Estela Bicho. "**Global implications of human tendencies towards automated driving and human driver availability in autonomous vehicles**" in 22nd International Conference on Human-Computer Interaction (HCI), Copenhagen, Denmark, July 19-24, 2020, pp. 179-192.
- o Flora Ferreira, Weronika Wojtak, Wolfram Erlhagen, Paulo Vicente, Ankit R Patel, Sergio Monteiro, and Estela Bicho. "**A dynamic neural model for endowing intelligent cars with the ability to learn driver routines: Where to go, when to arrive and how long to stay there?**" in Towards Cognitive Vehicles Workshop at 2019 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS), Macau, China, November 4-8, 2019, pp. 15-18.
(Best poster paper award)
- o Ankit R Patel, Sahar Azadi, Mohammad Hossein Babae, Nafiseh Mollaei, Kalpesh L Patel, and Dharendra R Mehta. "**Significance of robotics in manufacturing, energy, goods and transportation sector in Internet of Things (IoT) paradigm**" in 4th International Conference on Computing, Communication, Control and Automation (ICCUBEA), Pune, India, August 16-18, 2018, pp. 1-4.
- o Ankit R Patel, Dhaval R Patel, and Rahul D Sathvara. "**Future smart home using intelligent electronic devices**" in 4th IEEE International Conference on Smart Energy Grid Engineering (SEGE), Oshawa, Canada, August 21-24, 2016, pp. 100-105.
- o Dhaval R Vyas, Jyoti Ohri, and Ankit R Patel. "**Comparison of conventional & fuzzy based sliding mode PID controller for robotic manipulator**" in 2013 IEEE International Conference

on Individual & Collective Behaviours in Robotics (ICBR), Sousse, Tunisia, December 15-17, 2013, pp. 115-119.

- Ankit R Patel, Mahesh A Patel, and Dhaval R Vyas. "**Modeling & analysis of quadrotor using sliding mode control**" in 44th IEEE Southern Symposium on System Theory (SSST), Florida, USA, March 11-13, 2012, pp. 111-114.
- Ankit R Patel, Mahesh A Patel, and Dhaval R Vyas. "**Variational analysis & sequential quadratic programming approach for robotics**" in 2nd International Conference on Computer, Communication, Control and Information Technology (C3IT), Hooghly, India, February 25-26, 2012, pp. 636-640.
- Ankit R Patel, Ankit A Patel, Mahesh A Patel, and Dhaval R Vyas. "**Variational analysis approach and its applications to robotics**" in 2011 IEEE International Conference on Recent Advances in Intelligent Computational Systems (RAICS), Trivandrum, India, September 22-24, 2011, pp. 196-199.
- Ankit A Patel, and Ankit R Patel. "**Modeling of hybrid dynamical systems - An approach to solve complex power electronics circuits**" in 3rd IEEE International Conference on Emerging Trends in Engineering & Technology (ICETET), Goa, India, November 19-21, 2010, pp. 418-421.

Honors and Awards

- Research scholarship by European Regional Development Fund (ERDF) through PORTUGAL 2020 - Operational Program for Competitiveness and Internationalization (COMPETE 2020) from December 2018 to December 2021 in the "*EasyRide - Experience is Everything*" project.
- Best poster paper award in *Towards Cognitive Vehicles Workshop* at 2019 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS) held at Macau.

Employment

Academic Experience

- **University of Jeddah** **Jeddah, Saudi Arabia**
Lecturer in Electrical & Computer Engineering *29 November 2015–06 September 2017*
I was in-charge of control system laboratory. Course taught:
 - control systems
 - electromagnetic fields
 - computer programming with C++I was responsible for the teaching duties includes control systems, electromagnetic fields, computer programming in C++ and in-charge of control system laboratory. Working in the domain of robotics, medical science and Internet of Things (IoT).
- **Gujarat Power Engineering & Research Institute** **Mahesana, India**
Assistant Professor in Electrical Engineering *27 July 2015–21 November 2015*

I spent five month as a part of dynamic team member of Gujarat Power Engineering & Research Institute.

Course taught:

- control systems
- basic electrical engineering

I involved in the subject like control systems and basic electrical engineering. The working domain was robotics and solar energy systems.

L C Institute of Technology

Mahesana, India

- *Assistant Professor in Electrical Engineering*

01 December 2010–24 July 2015

I spent almost a half decade in a vibrant academic environment, where i nurture and make good friends too. Apart from academic, I involved in social activities like blood donation camp, arrange industrial visits, annual function, etc. Course taught:

- modern control systems
- applied linear algebra

I taught modern control systems, applied linear algebra. The areas of interest included control systems and smart grid.

L C Institute of Technology

Mahesana, India

- *Lecturer in Electrical Engineering*

25 August 2008–30 November 2010

Course taught:

- electrical power system
- inter connected power systems

I taught inter connected power systems and electrical power system at bachelor level.

S S Polytechnic College

Visnagar, India

- *Lecturer in Electrical Engineering*

01 September 2006–23 August 2008

Course taught:

- non-conventional energy sources
- electrical measurement and measuring techniques

I taught electrical measurement with measuring techniques and non conventional energy sources.

L C Institute of Technology

Mahesana, India

- *Ad-hoc Lecturer in Electrical Engineering*

04 July 2005–23 February 2006

Course taught:

- basic microprocessor & controller

I had taken course of basic microprocessor & controller.

Industrial Experience.....

Gujarat Energy Transmission Corporation Ltd.

Mahesana, India

- *Junior Engineer*

24 February 2006–31 August 2006

It was wonderful experience working in real time systems. The main duty included to operate and maintain four 66 kV substations. I involved in implementing Supervisory Control And Data Acquisition (SCADA), Automatic Metering Systems (AMS).

Gujarat Electricity Board

Wanakbori, India

- *Graduate Engineer Trainee*

17 September 2003–16 September 2004

The main duty was to analyze the operation of 1470 MW Thermal Power Station. To learn substation automation and power system protection.

Technical and Personal skills

- **Technical Skills:** Knowledge of MATLAB, SPSS, Python, Tableau
- **Linguistic Proficiency:** Gujarati, Hindi, Sanskrit, and English
- **General Business Skills:** Slow but steadily learner. Good presentation skills. Can write well organized and structured reports. Works well in a team.
- **Passport:** India.
- **Hobby:** Photography, Cooking, Traveling, Listening Music

Professional Services

Invited Talk.....

- Delivered a webinar on "*Automated Driving : Where are we, and what are we looking for?*" at Sigma Institute of Engineering, Vadodara, India on 31st March, 2021.
- "*Communication in Undergraduate Research*" ISTE-SRM Sponsored Short Term Training Program on Enhancing Communication Skills for Research in Technical Education, Mahesana, India, May 16, 2014.

Event Organized.....

- Coordinator of National Workshop on "*Applications of MATLAB in Electrical Engineering*" at L C Institute of Technology, Mahesana, India during March 15-17, 2012.

Referee Services.....

- Editorial Advisory Board Member for the book "Combating Fake News with Computational Intelligence Techniques" published by Springer, Year-2022.
- Technical Program Committee Member, International Conference on Information, Communication Cybersecurity (ICI2C), November 2021, Khouribga, Morocco.

Journals

- International Journal of Computing & Digital Systems, Bahrain
- IAES International Journal of Robotics & Automation
- IAES International Journal of Artificial Intelligence

Recent Conferences

- 2022 IEEE/AIAA Transportation Electrification Conference and Electric Aircraft Technologies Symposium (ITEC+EATS), Anaheim, USA, June 2022.
- The Transportation Research Board (TRB) 101st Annual Meeting, Washington D.C., USA, January 2022.
- 18th IFIP TC13 International Conference on Human-Computer Interaction (INTERACT), Bari, Italy, August 2021.
- ACM Conference on Human Factors in Computing Systems (CHI), Yokohama, Japan, May 2021.
- 32nd Australian Conference on Human-Computer Interaction (ozCHI), Sydney, Australia, December 2020.
- ACM Conference on Human Factors in Computing Systems (CHI), Hawaii, USA, April 2020.
- The Transport Research Arena Conference (TRA2020), Helsinki, Finland, April 2020.

- o 2019 Intelligent Transportation Society (ITS) of America Annual Meeting, Washington D.C., USA, June 2019.
- o 8th IEEE International Conference on Modeling, Simulation, and Applied Optimization, April 2019, Bahrain
- o 2nd IEEE International Symposium on Cloud Computing and Cyber Security, Aug 2018, London, UK
- o The 20th World Congress of the IFAC, Toulouse, France, July 2017.
- o 9th International Multi Conference on Engineering & Technological Innovation, July 2016, Orlando, USA

Academic Memberships.....

- o 2021 - present : Association for Computing Machinery (ACM),USA
- o 2018 - present : Institute of Electrical & Electronics Engineers (IEEE), USA

Volunteer Experience.....

- o Member - Transportation Research Board (TRB) Committee on Traveler Behavior and Values
- o Member - Ph.D. Course Commission at the University of Minho, Portugal
- o Member - IEEE Smart Cities Publication Committee
- o Member - Austrian Mobilities Research Network
- o Associated with MIT Caregivers Initiatives
- o Editorial Advisory Board Member - Computational Intelligent Techniques for Green Smart Cities, Springer
- o Editorial Advisory Board Member - Combating Fake News with Computational Intelligent Techniques, Springer
- o Technical Programme Committee Member - International Conference on Information, Communication & Cybersecurity (ICI2C), Morocco

Last updated on February, 2022.