

Fatemeh Basim

Email: f.ch.basim@gmail.com | Phone: (775) 462-9812

LinkedIn: [linkedin.com/in/fatemeh-basim](https://www.linkedin.com/in/fatemeh-basim)

Research Interest:

Integrative Neuroscience, Perception, Color Vision, Color Science, Visual Adaptation, Psychophysics

Education

Ph.D. in Integrative Neuroscience 2023-Present
Department of Psychology, University of Nevada, Reno, US
Supervisor: Michael Webster, Ph.D.
GPA: 3.98/4

M.Sc. in Color Science 2017–2021
Amirkabir University of Technology (Tehran Polytechnic), Tehran, Iran
Supervisor: Saeedeh Gorji Kandi, PhD., Mohsen Mohseni Bozorgi, PhD.

B.Sc. in Color Technology and Polymer Engineering 2013–2017
Amirkabir University of Technology, Tehran, Iran
Supervisor: AliAsghar Sarabi, PhD.

Teaching Experiences

Primary Instructor - Physiological Psychology, University of Nevada, Reno	Dec. 2024-Jan. 2025
Primary Instructor - Physiological Psychology, University of Nevada, Reno	Jun.–Jul. 2024
Teaching Assistant – Perception, University of Nevada, Reno	Jan.–May 2024
Teaching Assistant - Introduction to Research, University of Nevada, Reno	Sep.–Dec. 2024
Lab Instructor - Color Physics Lab, Amirkabir University of Technology	Feb.– Jun. 2020
Teaching Assistant - Color Physics, Amirkabir University of Technology	Feb.–Jun. 2019
Teaching Assistant - Color Reproduction, Amirkabir University of Technology	Sep. 2018- Feb. 2019

Awards and Honors

People's Choice Award – Makerthon 5, Innovation center, UNR (Designed a wearable safety and awareness solution for aging individuals during a 48-hour innovation sprint.)	Apr. 2024
Vision Sciences Society Travel Grant (May 2025)	Mar. 2025
Student Support Grant, Inter-Society Color Council	Dec. 2024
Graduate Student Association Travel Award, University of Nevada, Reno	May 2024
Graduate Student Association Travel Award, University of Nevada, Reno	May 2023
Raymond H. Berner Scholarship, University of Nevada, Reno	Jan. 2023
Ranked 2nd in the Iran National Universities Entrance Exam for Master's	2017

Manuscripts

F. Basim, A. Ishaq, J. R. Macyszko, E. Goddard, V. Honson, J. Kim, K. A. Jameson, & M. A. Webster. (2025). *Achromatic loci in normal and anomalous trichromats*. Journal of the Optical Society of America A, 42(5), B245–B255.

Conference Papers

- **F. Basim**, A. Ishaq, E. Goddard, M. A. Webster. (2025). Compensating for Color Deficits: Perceptual and Neural Adjustments in Anomalous Trichromacy. Inter-Society Color Council (ISCC) Color Impact 2025, June 2025, Rochester, NY, USA. (Upcoming poster).
- **F. Basim**, A. Ishaq, E. Goddard, M. A. Webster. (2025). Neural gain compensation for color deficiencies: evidence from color contrast adaptation. Vision Sciences Society (VSS), May 2025, St. Pete, FL, USA. (Upcoming talk).
- C. Simoncelli, **F. Basim**, E. Goddard, M. A. Webster. (2025). Individual differences in focal colors and color naming. Vision Sciences Society (VSS), May 2025, St. Pete, FL, USA. (Upcoming poster).
- J. R. Macyszko, **F. Basim**, M. Webster. (2024). Color categories in normal and color-deficient vision. 26th International Color Vision Society (ICVS), July 2024, Ljubljana, Slovenia.
- **F. Basim**, M. A. Webster. (2024). Adapting to Art: Adaptation Alters Impressions of Impressionist Painting Styles. 24th International Color Vision Society (VVS), May 2024, St. Pete, FL, USA.
- **F. Basim**, S. Gorji Kandi. (2021). The effect of Saunderson correction on applicability of Kubelka-Munk theory in prediction of optical properties of paints with different gloss values. 8th International Color and Coating Congress (ICCC), October 2021, Tehran, Iran. (Accepted for oral presentation).
- **F. Basim**, A. A. Sarabi, S. Roshan. (2017). Electrochemical study of zinc phosphate conversion coating applied on AA6061. 7th International Color and Coating Congress (ICCC), December 2017, Tehran, Iran.
- N. Mostofi Sarkari, **F. Basim**, A. Habibiyan. (2015). Characterization of plasma treatment on high-density polyethylene surface wettability and adhesion. 6th International Color and Coating Congress (ICCC), November 2015, Tehran, Iran.
- N. Mostofi Sarkari, A. Habibiyan, **F. Basim**. (2015). Investigation of crystallinity effects on the surface of oxygen plasma treated poly(ethylene terephthalate). 6th International Color and Coating Congress (ICCC), November 2015, Tehran, Iran.

Research Assistantship

Graduate Research Assistant - Color Perception Lab, University of Nevada, Reno	Feb. 2023-Present
Graduate Research Assistant - Color Physics Lab, Amirkabir University of Technology	Sep. 2017- Jan. 2021
Research Assistant - Corrosion Lab, Amirkabir University of Technology	May-Sep. 2017

Skills

Psychophysical experimental design, Data analysis
Programming languages: MATLAB, R, Python

Toolboxes: PsychoPy, Psychtoolbox
Software: Microsoft Excel, Adobe Photoshop

General Work Experiences

R&D Engineer Amirkabir Zagros Paint and Coating Manufacturer	<i>Feb.-Aug. 2021</i>
R&D Engineer Jelveh Ara Paint and Coating Manufacturer	<i>Feb.-Nov. 2020</i>
Internship Iran Khodro Automaker Co. - Automotive Paint (IKCO), Tehran, Iran	<i>Jun.-Aug. 2016</i>

Volunteer Works and Event Planning

Vice President, Iranian Students Association; Committee for planning traditional Iranian events for Iranian students (e.g., Yalda Night, Dec. 2024), University of Nevada, Reno | Aug. 2024 – Present

Event Planner:

Integrative Neuroscience Spring Retreat, University of Nevada, Reno | May 2024
Iran's 1st Color Matching Competition (ICMC), AUT, Tehran, Iran
Iran's 2nd Color Matching Competition (ICMC), AUT, Tehran, Iran
16th National Iranian Corrosion Congress, Tehran, Iran
7th International Color and Coating Congress (ICCC), AUT, Tehran, Iran
Graduation Ceremony for the Class of 2017, AUT, Tehran, Iran

Event and Committee Leader:

Competitions Committee, 10th Students Scientific Association of Polymer Engineering and Color Technology Department, AUT, Tehran, Iran
1st International Polymer and Color Scientific Photography Competition (PCSP), AUT, Tehran, Iran

References

Michael A. Webster, Ph.D., Foundation Professor, University of Nevada, Reno, Psychology Department, Reno, USA.
Phone: (775) 682-8691
Email: mwebster@unr.edu

Saeideh Gorji Kandi, PhD., Assistant Professor, Amirkabir University of Technology (AUT), Polymer Engineering and Color Technology Department, Tehran, Iran.
Phone: (+98)21 645 42431
Email: s.gorji@aut.ac.ir

Mohsen Mohseni Bozorgi, PhD., Professor, Amirkabir University of Technology (AUT), Polymer Engineering and Color Technology Department, Tehran, Iran.
Phone: (+98)21 645 42441
Email: mmohseni@aut.ac.ir