

آخرين بروزرسانی: ۱۴۰۴/۱۱/۱۴

Last update: 2/ 2/ 2026

Personal Information:

Name: **Samira**

Surname: **Hassanzadeh**

Current status: Ph.D. in optometry, Assistant professor; Mashhad University of Medical Sciences.

Address: Optometry Department, School of Paramedical Sciences and Rehabilitation, Dr. Kharazmi Building, Ferdowsi University Campus, Azadi Square, Mashhad, Iran.

E-mail: hasanzadehs@mums.ac.ir

Nationality: Iranian

Present resident in Iran



Academic Background:

- **Ph.D. in optometry** **2016- Feb 2021**
Institution: Para medical College, Mashhad University of Medical Sciences (MUMS), Mashhad, Iran
Thesis title: To assess the effect of intense pulse light therapy in patients with meibomian gland dysfunction: a randomized clinical trial.
Overall GPA: 19.38 out of 20
- **Sabbatical** **Jan 2020-Jul 2020**
Institution: Ocular surface lab, department of ophthalmology, School of medical and health sciences, the University of Auckland, New Zealand.
Supervisor: Prof. Jennifer P. Craig
Research Title: Applying artificial intelligence to improve meibomian gland dysfunction diagnosis.
- **MSc. in medical education** **2012- 2014**

THE CURRICULUM VITAE
Dr. Samira Hassanzadeh

Institution: medical College, Mashhad University of Medical Sciences (MUMS), Mashhad, Iran.

Thesis title: to assess learning styles among Iranian ophthalmology residents.

■ **M.Sc. in Optometry** **2006-2009**

Institution: Paramedical College, Mashhad University of Medical Sciences (MUMS), Mashhad, Iran.

Thesis title: A Study on the sensitivity of PSRT, red target perimetry, color vision and VEP tests in early detection of ocular side effects from hydroxychloroquine.

Overall GPA: 18.42 out of 20.0 (graduated as cum laude)

■ **B.S. in Optometry** **2000-2004**

Institution: Paramedical College, Mashhad University of Medical Sciences (MUMS), Mashhad, Iran.

Thesis title: Shock-Hartmann aberrometer & wavefront sensing (principles, applications and advances).

Overall GPA: 16.91 out of 20.0 (graduated as summa cum laude)

Research interests:

- Dry eye and anterior surface diseases
- Ophthalmic imaging, corneal biomechanics, and refractive surgery
- Special contact lenses for keratoconus, irregular corneas, and post refractive surgery
- Diagnostic techniques in ophthalmology using machine learning, artificial intelligence, and deep learning

Experiences:

- Head of contact lens and refraction **2017-present**
clinic of Khatam Eye Hospital, Mashhad, Iran
- Supervisor of optometry rounds **2011-present**
of ophthalmology residents
- Teaching assistant and lecturer: **2009-present**

Department of optometry, Paramedical College, Mashhad University of Medical Sciences, Mashhad, Iran

- Member of refractive error research center **2005-present**
- Head of Optometry clinic of Khatam Eye Hospital, Mashhad, Iran. **2005-2010**

Teaching courses

- Anterior segment and contact lenses
- Techniques of refractive surgery
- Physiological optics
- Contact lenses I & II
- Optometry clinics
- Pathology of the eye

Researches:

- Examination of the prevalence and associated factors of keratoconus among school-aged adolescents (12 to 18 years old) in the city of Karbala in 2026. **(2025)**
- To assess the psychometric characteristics of the Persian version of the dry eye questionnaire (DEQ-5) in dry eye patients. **(2025)**
- To assess the effect of saline and artificial tear use under miniscleral lenses on refractive changes, contrast sensitivity and corneal aberrometry in healthy candidates. **(2024)**
- To assess corneo-scleral profile in normal and keratoconus patients. **(2024)**
- Comparison of visual acuity and internal aberration patterns among patients with multifocal IOLs of Physiol and Liberty. **(2024)**
- Epithelial Thickness Changes Following Small Incision Refractive Lenticule Extraction (SMILE): A systematic review and meta-analysis. **(2023)**

- To assess the efficacy and safety of photorefractive keratectomy surgery in patients with hyperopia and hyperopic astigmatism: A systematic review and meta-analysis. **(2023)**
- Efficacy and safety of photorefractive keratectomy surgery in hyperopic and hyperopic astigmatism patients. **(2023)**
- Translation, and reliability and validity assessment of the Persian version of contact lens dry eye Questionnaire (CLDEQ-8) and dry eye evaluation among soft contact lens wearers. **(2023)**
- A comparative study on retinal, choroidal, and optic nerve head changes in patients with early and late-onset Parkinson's disease. **(2023)**
- Evaluation of convergence in patients with prior Medial rectus recession surgery. **(2023)**
- Changes of corneal epithelial thickness profile after photorefractive keratectomy and transepithelial photorefractive keratectomy. **(2023)**
- To assess the effect of the amount of static cyclotorsion correction by Iris registration system on outcomes of Photorefractive Keratectomy surgery in moderate to high degrees of astigmatism. **(2023)**
- To assess the effect of omega-3 supplementation in the management of meibomian gland dysfunction: A Systematic Review and Meta-analysis of clinical trials. **(2023)**
- To assess the reliability and validity of the Persian version of the standardized photophobia questionnaire **(2023)**
- To assess coma aberration and manifest refractive astigmatism, after intracorneal ring implantation in patients with duck and croissant form of keratoconus **(2023)**
- To assess the reliability and validity of the Persian version of dry eye McMonnies questionnaire **(2023)**
- The effect of sunglass filters with different light transmittance on photo sensitivity and monocular eye closure in patients with intermittent exotropia **(2022)**

- Comparison of moderate to high myopic astigmatism correction using PRK and transepithelial PRK **(2022)**
- To assess the correlation of strabismic and anisometropic amblyopia with vestibulo ocular reflex **(2022)**
- To Assess the Effect of Amblyopia Treatment on Vestibulo-Ocular Reflex **(2022)**
- To Assess the Agreement of Two Scheimpflug-Based Imaging Systems (Sirius and Pentacam HR) in Ocular Anterior Segment Evaluation of Normal Participants. **(2021)**
- Comparison of patient's tearfilm and meibomian gland dysfunction after Trans photorefractive keratectomy and photorefractive keratectomy. **(2020)**
- To assess the agreement of PERAMIS wavefront- based refraction, dry and cycloplegic auto refraction and subjective refraction in refractive surgery candidates. **(2020)**
- Ocular surface changes and meibomian glands' function in patients with dyslipidemia. **(2019)**
- The development and evaluation of self-care system for patients with dry eye. **(2018)**
- Intraocular Pressure comparative assessment after SMILE surgery using Goldmann, Corvis ST, Air-puff and Icare tonometry. **(2018)**
- To assess the effect of intense pulse light therapy in patients with meibomian gland dysfunction: a randomized clinical trial. **(2018)**
- A comparative study on ocular surface changes before and after PRK and SMILE refractive surgeries. **(2018)**
- To assess the professionalism in ophthalmology and pediatric residents of Mashhad University of Medical Sciences. **(2018)**
- A comparative study on corneal biomechanical changes after PRK and SMILE refractive surgical techniques. **(2018)**
- A comparison of over minus correction and observation in children with intermittent exotropia, aged 3 to 10 years old. **(2018)**

- To assess refractive changes in premature infants with ROP, after intravitreal bevacizumab injection. **(2016)**
- An assessment of aberrometric changes after upper lid ptosis surgery. **(2014)**
- Normative Values and Contralateral Comparison of Anterior Chamber Depth Measured by Orbscan II in an Iranian Population. **(2013-2014)**
- An assessment of aberrometric changes after strabismus surgery in patients with manifest horizontal ocular deviations. **(2012- 2013)**
- A comparative study on visual and optical performance of Akreus AO and Kantur AB intraocular lenses after phacoemulsification. **(2011- 2012)**
- Correlation between Corneal Endothelial Cell Loss and Location of Phacoemulsification Incision. **(2010-2011)**
- A comparative study on distance estimation in virtual environment between pilots and non- pilots. **(2010-2011)**
- A study on the amount of ocular torsion, measured with slit lamp and 90 D lens. **(Sept. 2009- Feb. 2010)**
- An investigation of relationship between biomechanical factors from ORA device, with corneal volume measured by Pentacam, in normal eyes. **(2009-2010)**
- A comparative study on the ability of color vision, photo stress recovery time, and VEP tests, in early detection of ocular toxicity from hydroxychloroquine, in rheumatoid arthritis and systemic lupus erithmatosus. **(2008-2009).**
- A study on color vision and contrast sensitivity changes, before and after silicone gel injection in to the eye. **(2008)**
- A comparative study on near vision quality, assessed by near contrast sensitivity test, with and without astigmatic correction. **(2008)**
- The comparison of the amount of difference between cycloplegic and non-cycloplegic refraction in different age groups. **(2007)**

- A comparative study on the role of VEP, contrast sensitivity and color vision tests, in early detection of thyroidal compressive optic neuropathy. (2007)

Publications (H-INDEX: 8)

- Zarei-Ghanavati S, **Hassanzadeh S**, Golestani S, Tonk RS, Shams SS. High Astigmatism Correction in Myopia: A Comparative Study of Photorefractive Keratectomy and Keratorefractive Lenticule Extraction. *Cornea*. 2025 (EPUB).
- Shariati R, Hemmatian Z, **Hassanzadeh S**, Mehrad-Majd H, Zarei-Ghanavati S, Ziaei M. Corneal epithelial thickness remodeling after small incision lenticule extraction (smile): a systematic review and meta-analysis. *Expert Review of Ophthalmology*. 2025 Nov 23 (EPUB).
- **Hassanzadeh S**, Ghorbani MM, Rostami M, Karimpour M, Sharifi M, Marouzi P. Validity and reliability of the Persian translation of the McMonnies dry eye questionnaire. *Clin Exp Optom*. 2025 Sep 29:1-8 (EPUB).
- Sharifi M, Jafarzadeh S, Ghorbani MM, **Hassanzadeh S**, Kiarudi MY, Rostami M. The effect of amblyopia therapy on ocular vestibular evoked myogenic potentials. *Clin Exp Optom*. 2025 Sep 11:1-10 (EPUB).
- Shams SS, **Hassanzadeh S**, Zarei-Ghanavati S, Ziaei M, Bayati S. Predictive factors for outcomes of photorefractive keratectomy in myopic eyes. *Int J Ophthalmol*. 2025 Nov 18;18(11):2143-2148.
- Zarei-Ghanavati S, Sadeghi J, **Hassanzadeh S**, Shayan Far M, Heravian Shandiz J, Jamali J, Abbasi Mehrabadi A, Irandoost N, Aryanmanesh S, Gharouni A, Varshovi-Jaghargh I. Dry eye after photorefractive keratectomy (PRK) and transepithelial photorefractive keratectomy (T-PRK): a comparative clinical study. *Int Ophthalmol*. 2025 Jun 20;45(1):251.
- **Hassanzadeh S**, Fereydouni F, Bakhtiari E. Visual and refractive outcomes of photorefractive keratectomy in hyperopia and hyperopic-astigmatism: A systematic review and meta-analysis. *Photodiagnosis Photodyn Ther*. 2025 Jun;53:104604.

- Rostami M, Kiarudi MY, Sharifi M, **Hassanzadeh S**, Jafari K. Evaluation of binocular summation ratio before and after vision training in patients with intermittent exotropia: A pilot prospective cohort study. *J Optom.* 2025 Apr-Jun;18(2):100542.
- Ostadimoghadam H, Abdi S, Shahbazi S, **Hasanzadeh S**, Jamali J, Jafari A. The impact of static cyclotorsion correction using on photorefractive keratectomy outcomes in patients with moderate and high astigmatism. *Int Ophthalmol.* 2025 Mar 30;45(1):135.
- Agharezaei Z, Shirshekar M, Firouzi R, **Hassanzadeh S**, et al. A new morphological classification of keratoconus using few-shot learning in candidates for intrastromal corneal ring implants. *Biomedical Signal Processing and Control.* 2025, 106.
- Hedayati M, Etezzad Razavi M, Moghadas Sharif N, **Hassanzadeh S**, Bakhtiari E, Ghasemi-Moghaddam S. Combined office-based and home-based orthoptic training in the management of intermittent exotropia in children: a randomized clinical trial. *Strabismus.* 2025 Jun;33(2):109-117.
- Sharifi M, **Hassanzadeh S**, Najjaran M, Shahsavari N, Morovatdar N. Comparison of the Effects of Wearing Overminus Spectacles versus Patch Therapy in 3- to 8-Year-Old Children with Intermittent Exotropia: A Randomized Controlled Trial. *J Gorgan Univ Med Sci* 2024; 26 (4) :13-20.
- Zarei-Ghanavati S, Najjaran M, **Hassanzadeh S**, Khabazkhoob M, Gokul A, Ziaei M. Agreement of a Pyramidal Wavefront-Based Autorefraction with Dry, Cycloplegic, and Subjective Refraction in Myopic Refractive Surgery Candidates. *J Curr Ophthalmol.* 2024 Oct 16;36(1):54-60.
- Rostami M, Kiarudi MY, **Hassanzadeh S**, Etezzad Razavi M, Sharifi M, Ziaei M. Transient eye closure and ocular preference in patients with intermittent exotropia. *J AAPOS.* 2024 Dec;28(6):104015.
- Rostami M, Kiarudi MY, **Hassanzadeh S**, Sharifi M, Ziaei M. The effect of sunglass filters on contrast sensitivity, monocular eye closure, and blinking rate in people with intermittent exotropia. *Clin Exp Optom.* 2025 Aug;108(6):733-737

- Shams SS, **Hassanzadeh S**, Zarei-Ghanavati M, Ravanshad Y, Sadeghi J, Ziaei M, Zarei-Ghanavati S. The effect of Belin-Ambrósio Deviation (BAD-D) Index on two-year refractive outcomes of Photorefractive Keratectomy (PRK). *J Cataract Refract Surg.* 2024 Nov 1;50(11):1143-1150.
- Sharifi M, Jafarzadeh S, Kiarudi MY, **Hassanzadeh S**, Rostami M. Ocular vestibular evoked myogenic potentials in different types of amblyopia. *Clin Exp Optom.* 2025 Mar;108(2):191-195.
- **Hassanzadeh S**, Mesbahi S, Rostami M, Karimpour M, Dadgar Moghadam, M, Marouzi P. Psychometric Properties of the Persian Translation of the 12-Item Utah Photophobia Symptom Impact Scale Questionnaire. *Neuro-Ophthalmology* 2024; 48(4), 249–256.
- Zarei-Ghanavati S, Nikpayam M, Namdari M, Bakhtiari E, **Hassanzadeh S**, Ziaei M. Agreement between a Spectral-Domain Ocular Coherence Tomography Biometer with a Swept-Source Ocular Coherence Tomography Biometer and an Optical Low-Coherence Reflectometry Biometer in Eyes with Cataract. *J Curr Ophthalmol.* 2023 Dec 21;35(2):153-158.
- Zarei-Ghanavati S, Jafarzadeh SV, Es'haghi A, Kiarudi MY, **Hassanzadeh S**, Ziaei M. Comparison of 110- and 145- μ m Small-Incision Lenticule Extraction Cap Thickness: A Randomized Contralateral Eye Study. *Cornea.* 2024 Feb 1;43(2):154-158.
- Zarei-Ghanavati S, **Hassanzadeh S**, Ambrósio R. Corneal Ectasia after Laser-Assisted Small-Incision Lenticule Extraction: The Case for an Enhanced Ectasia Risk Assessment. *Journal of Current Ophthalmology.* 2022 Jul 1;34(3):357.
- Siamak Zarei-Ghanavati, **Samira Hassanzadeh**, Abbas Azimi Khorasani, Asieh Ehsaei & Elham Bakhtiari (2022) Efficacy of five-flash intense pulsed light therapy technique in patients with meibomian gland dysfunction, *Clinical and Experimental Optometry* 2022;105 (7):687-693.
- Zarei-Ghanavati S, Jafarpour S, **Hassanzadeh S**, Bakhtiari E, Daraee G, Darabi Monadi S, Ziaei M. Changes in Corneal Biomechanical Properties after Small Incision Lenticule Extraction (SMILE) and Photorefractive Keratectomy (PRK), using a non-contact tonometer. *Cornea* 2022; 41(7):886-893.

- Zarei-Ghanavati S, **Hassanzadeh S**, Azimi Khorasani A, Ehsaei A. The Effect of Meibomian Gland Dysfunction Treatment on Sleep Quality. *J of Current Ophthalmol* 2021; 3(33): 272-76.
- Yazdani N, Sadeghi R, Ehsaei A, Taghipour A, **Hasanzadeh S**, Zarifmahmoudi L, Heravian Shandiz J, Under-correction or full correction of myopia? A meta-analysis. *Journal of Optometry* 2021; 17(1):11-19.
- Azimi Khorasani A, Ehsaei A, Gerami M, **Hassanzadeh S**, Yazdani N. The effect of workplace and unusual working hours on dry eye symptoms between petrochemical industry workers Iran *Occupational Health*. 2020; 17(1):41.
- **Hassanzadeh S**, Varmaghani M, Zarei-Ghanavati S , Heravian Shandiz J, Azimi Khorasani A. Global Prevalence of Meibomian Gland Dysfunction: A Systematic Review and Meta-Analysis. *Ocul Immunol Inflamm* 2021; 29(1):66-75.
- Etezzad Razavi M, Shoeibi N, **Hassanzadeh S**, Kianmehr S, Bakhtiari E. Refractive outcome of intravitreal bevacizumab injection in comparison to spontaneous regression of retinopathy of prematurity (ROP). *STRABISMUS* 2020; 28(1): 49–54.
- Zarei – Ghanavati S, Yahaghi B, **Hassanzadeh S**, Ghayour- Mobarhan M, Hakimi HR, Eghbali P. Serum 25-hydroxyvitamin D, Selenium, Zinc and Copper in patients with keratoconus. *J of Current Ophthalmol* 2020; 32(1): 26-31.
- Abrishami M, Fadakar P, Mirghorbani M, Masoumi A, **Hassanzadeh S**. Effect of night work on image quality of optical coherence tomographyAngiography. *J of Current Ophthalmol* 2019; 31(4): 438-441.
- Ostadi Moghaddam H, Mohammadi Z, Yazdani N, **Hasanzadeh S**, Sobhani Rad D, Heravian Shandiz J, Khabazkhoob M, Ehsaei A.The Effect of Binocular Disorders and Colored Filters on Reading Ability of Dyslexic Children. *JPSR* 2019; 8(2): 29-36.
- **Hassanzadeh S**, Karimi Moonaghi H, Derakhshan A, Hosseini SM, Taghipour A. Preferred Learning Styles among Ophthalmology Residents: An Iranian sample. *J of Vis Research* 2019; 14(4): 483-490.

- Zarei- Ghanavati S, Eslampour A, Shokouhirad S, Mazloun J, Yousefian A, **Hassanzadeh S**, Bakhtiari E, Eghbali P. The effect of eye dominance on patients' cooperation and perceived pain during photorefractive keratectomy (PRK). *J of Current Ophthalmol* 2019; 31(4): 373- 376.
- Arish M, Bagherzadeh O, Ahmadi SS, Sadeghi-Allahabadi J, **Hassanzadeh S**. Short-Term Results of Sutureless Scleral Tunnel Trabeculectomy Using Adjunctive Topical Bevacizumab. *Med Hypothesis Discov Innov Ophthalmol*. 2018; 7(2): 63- 7.
- Derakhshan A, Eslampour A, Safinezhad E, **Hassanzadeh S**. The effect of intravitreal bevacizumab injection on the corneal endothelial cells: systematic review. *Rev Clin Med* 2016; 3 (2): 78- 83.
- GharaeeH, Zabihifard M, Eslampour AR, **Hassanzadeh S**, Shafiei M. A comparative study on visual and optical performance of Akreos AO and Kontur AB IOLs after phacoemulsification cataract surgery. *J of Current Ophthalmol* 2016; 1-5.
- GharaeeH, Abrishami M, Shafiee M, **Hassanzadeh S**, Abrishami M, Eghbali P. Normative Values and Contralateral Comparison of Anterior Chamber Depth Measured by Orbscan II in an Iranian Population. *J of Ocular Diseases and Therapeutics* 2014; 2: 40-44.
- Garaee H, Kargozar A, Daneshvar-Kakhki¹ R, Sharepour M, **Hassanzadeh S**. Correlation between Corneal Endothelial Cell Loss and Location of Phacoemulsification Incision. *J Ophthalmic Vis Res* 2011; 6 (1): 13-17.
- Heravian H, Saghafi M, Shoeibi N, **Hassanzadeh S**, Shakeri MT, Sharepour M. A comparative study on the ability of color vision, photostress recovery time, and visual evoked potential tests, in early detection of ocular toxicity from hydroxychloroquine. *J Int Ophthalmol* 2011; 31(4): 283-289.
- Sedaghat MR, Sharepour M, **Hasanzadeh S**, Abrishami M. The corneal volume and biomechanical corneal factors: Is there any correlation? *J Res Med Sci* 2011; 17(1): 32-39.
- Kargozar A, Saber moghaddam AA, Shakeri MT, **Hasanzadeh S**. The comparison of the amount of difference between cycloplegic and

noncycloplegic refraction in different age groups. Med J of Mashhad university of medical sciences 2007; 52(3): 165-72.

Presentations

- Customized impression-based scleral contact lenses. **Oral presentation. Fifth congress of optometry and vision sciences: Clinical contact lens fitting. 2026, Mashhad, Iran.**
- Office-based treatments for dry eye. **Oral presentation. Forth congress of optometry and vision sciences: Clinical and paraclinical tests in optometry. 2025, Mashhad, Iran.**
- Vision screening in children and adults. **Oral presentation, Ophthalmology and nursing congress 2023, Mashhad, Iran.**
- The development and evaluation of customized self-care, mobile-based application for patients with dry eye. **Oral presentation. 20 th optometry congress, 2023, Mashhad, Iran.**
- Deep learning applications in pediatric optometry. **Oral presentation. Pediatric optometry congress, 2022, Mashhad, Iran.**
- Efficacy of a Novel Five-Flash Intense Pulsed Light Therapy Technique in Patients with Meibomian Gland Dysfunction: A Randomized Controlled Trial. **E-poster. 36th Asia-Pacific Academy of Ophthalmology (APAO) Congress, 2021, Hong Kong.**
- Correlation between Corneal Endothelial Cell Loss and Location of Phacoemulsification Incision. **E- Poster, 20th Congress of Ophthalmology 2010, Tehran, Iran.**
- A comparative study on the ability of color vision, photostress recovery time, and visual evoked potential tests, in early detection of ocular toxicity from hydroxychloroquine. **Asia ARVO, Singapore, 20-22 Jan 2011.(poster presentation)**
- A comparative study on the ability of color vision, photostress recovery time, and visual evoked potential tests, in early detection of ocular toxicity

from hydroxychloroquine. **9th International yes meeting, Porto, Portugal
Sep. 2014 (oral presentation)**

Awards and Honors:

- Scholarship award from Mashhad University of Medical Sciences for a sabbatical at the University of Auckland, New Zealand.
- **First dignity** in Iran's Ph.D. candidacy exam, Sep. 2016
- **Third dignity** in Iran's MSc. Candidacy exam, Sep. 2006

Skills and Qualifications:

Software

- Microsoft Office, SPSS, Med Calc., End note, Comprehensive meta- analysis (CMA), Open Meta, ImageJ.

Language Proficiency

- **Farsi** (Persian- native)
- **English** (fluent in speaking, writing, listening and reading)
- **French** (beginner in speaking, writing, listening and reading)
- **Arabic** (basic in in speaking, writing, listening and reading)

References:

- Available on request