

Dr Ankit Mathur

CURRICULUM VITAE | OPTOMETRY, VISION SCIENCE & PRODUCT

Brisbane, QLD

ankitlovey@gmail.com

/ [LinkedIn](#)

/ [saryu.ai](#)

/ [optoguide.com.au](#)

PROFILE

AHPRA-registered, therapeutically endorsed optometrist and vision scientist with 20 years across clinical practice, industry-linked research, tertiary teaching and practice ownership — now building AI products for clinicians and for people who need a complicated goal turned into a workable plan. 26 peer-reviewed journal articles, 8 conference publications and \$310,138 in research funding, including an Australian Research Council Linkage grant with Carl Zeiss Vision.

26

peer-reviewed journal articles

\$310K

research funding secured

21

conference presentations

14

teaching appointments

EMPLOYMENT HISTORY

Founder

2026 - present

[Saryu & OptoGuide](#) | Brisbane, QLD

- Saryu: an AI workflow-planning platform that turns plain-language goals into ordered steps, tool recommendations, ready-to-use prompts and realistic estimates.
- OptoGuide: clinical decision-support software for assessment, therapeutics, prescribing, referral and professional workflow.
- Full ownership of product strategy, design, engineering and go-to-market.

Optometrist (Locum)

Mar 2024 - present

[Multiple practices](#) | Brisbane, QLD

- Comprehensive eye health examinations, refraction and therapeutic management.
- Co-management and referral relationships with ophthalmologists and general practitioners.

Senior Lecturer

2025

[Queensland University of Technology](#)

- Teaching into the optometry programme, connecting contemporary clinical practice with the underlying vision science.

Optometry Director & Shareholder

Nov 2022 - Mar 2024

[Specsavers Lutwyche](#), QLD

- Joint owner and clinical lead; led a team of optical dispensers and optometrists.
- Managed day-to-day store operations, business development and commercial performance.
- Managed ocular pathology and prescribed ophthalmic medication.

Optometrist (Full-time)

Jul 2015 - Nov 2022

[Sutco Optometry - Specsavers](#), Nambour & Kawana, QLD

- Seven years of high-volume primary-care optometry with therapeutic management across a broad regional patient base.

Research Officer (part-time)

Oct 2014 - Oct 2016

[School of Optometry, QUT](#) | with [Carl Zeiss Vision](#)

- Optical system modelling in Zemax; image analysis in MATLAB and ImageJ; programming in MATLAB and C#.
- Experimental design, grant preparation and peer-reviewed manuscript preparation.

Optometrist

May 2014 - Jul 2015

[Costco Wholesale](#), North Lakes, QLD

- Clinical optometry alongside management of the optical department's staff, rostering, stock and sales targets.

Optometrist (Locum, contractual) Big W Vision (Woolworths) , Specsavers , Bupa Optical - Concurrent contract optometry across three national networks.	Aug 2014 - Jul 2015
Research Fellow School of Optometry, QUT with Carl Zeiss Vision - Participant recruitment, protocol execution, analysis and interpretation. - Built optical systems for measuring ocular parameters. - Co-supervised a PhD student, mentored two others, and supervised undergraduate research groups.	Jul 2013 - May 2014
Australian Post-Doctoral Fellow (Industry) School of Optometry, QUT ARC Linkage LP100100575 with Carl Zeiss Vision - Three-year ARC industry fellowship on peripheral optics, aberration structure and their effect on real visual performance. - Contributed to the successful ARC Linkage application; reported monthly to the industry partner. - Produced the majority of the peer-reviewed output listed below.	Jul 2010 - Jul 2013
Senior Research Optometrist (part-time) LANDMARK study, IHBI / School of Optometry, QUT - Optometric workup of diabetic and control participants: OCT, visual fields, frequency doubling perimetry, fundus photography. - Non-contact corneal aesthesiometry and corneal nerve imaging; referral correspondence to treating clinicians.	May 2010 - May 2011
Optical Dispenser (part-time) Specsavers - Garden City & Carindale, QLD - Frame and lens selection, pupillary measurements, order management and patient education.	Dec 2010 - Apr 2011
Research Assistant → Senior Research Assistant Ophthalmic and Visual Optics Laboratory, IHBI / QUT - Zemax re-analysis isolating corneal and internal contributions to peripheral aberration. - MATLAB programming, Zemax scripting, manuscript preparation and grant applications.	Sep 2009 - Jun 2010
Optometrist - Retina Department L.V. Prasad Eye Institute, Hyderabad, India - OCT, fundus fluorescein angiography, fundus photography, electrophysiology and ocular ultrasonography. - Optometrist and stereo fundus photographer on the Eli Lilly / EMMES multi-centre MBDL diabetic macular oedema study. - Optometrist on the Radial Optic Neurotomy for Central Vein Occlusion (ROVO) study.	Aug 2004 - Jan 2006

EDUCATION & QUALIFICATIONS

AI & Machine Learning Caltech	2024 - 2025
Graduate Certificate in Ocular Therapeutics School of Optometry and Vision Science, QUT, Australia	2015 - 2016
Full Stack Web Development Certification Independent study	2015 - 2016
Competency in Optometry Examination (OCANZ) Optometry Council of Australia and New Zealand, Melbourne	Oct 2013
Fellow of the American Academy of Optometry (FAAO) Awarded at the AAO Meeting 2010, San Francisco, USA	2010 - 2017
Doctor of Philosophy (PhD) School of Optometry and Vision Science / IHBI, QUT, Australia Thesis: "Peripheral ocular monochromatic aberrations." Supervisors: Prof. David A. Atchison and Dr Andrew Carkeet	2006 - 2009
Bachelor of Science in Optometry (BS Optom) Bausch & Lomb School of Optometry, L.V. Prasad Eye Institute / BITS, India — GPA 9.18 / 10	2000 - 2004

REGISTRATION & PROFESSIONAL MEMBERSHIP

PEER-REVIEWED JOURNAL ARTICLES

(26)

1. Atchison DA, Suheimat M, **Mathur A**, Lister LJ, Rozema JJ (2016). "Anterior corneal, posterior corneal, and lenticular contributions to ocular aberrations." *Investigative Ophthalmology and Visual Science*, 57 (13): 5263-5270.
2. Verkicharla PK, Suheimat M, Pope JM, Sepehrband F, **Mathur A**, Schmid KL, Atchison DA (2015). "Validation of a partial coherence interferometry method for estimating retinal shape." *Biomedical Optics Express*, 6 (9): 3235-3247.
3. **Mathur A**, Suheimat M, Atchison DA (2015). "Pilot study: effect of age on visual acuity with defocus and astigmatism." *Optometry and Vision Science*, 92 (3): 267-271.
4. Adnan, Suheimat M, **Mathur A**, Efron N, Atchison DA (2015). "Straylight, lens yellowing and aberrations of the eyes with type 1 diabetes." *Biomedical Optics Express*, 6 (4): 1282-1292.
5. Adnan, Suheimat M, Efron N, Edwards K, Pritchard N, **Mathur A**, Mallen EAH, Atchison DA (2015). "Biometry of eyes with type 1 diabetes." *Biomedical Optics Express*, 6 (3): 702-715.
6. Adnan, Efron N, **Mathur A**, Edwards K, Pritchard N, Suheimat M, Atchison DA (2014). "Amplitude of accommodation in type 1 diabetes." *Investigative Ophthalmology and Visual Science*, 55 (10): 7014-7018.
7. Atchison DA, **Mathur A** (2014). "Effects of pupil center shift on ocular aberrations." *Investigative Ophthalmology and Visual Science*, 55 (9): 5862-5870.
8. **Mathur A**, Gehrmann J, Atchison DA (2014). "Influences of luminance and accommodation stimuli on pupil size and location." *Investigative Ophthalmology and Visual Science*, 55 (4): 2166-2172.
9. Atchison DA, **Mathur A**, Suheimat M, Charman WN (2014). "Visual field co-ordinates of pupillary circular axis and optical axis." *Optometry and Vision Science*, 91 (5): 582-587.
10. Atchison DA, **Mathur A**, Varnas S (2013). "Visual performance with lenses correcting peripheral refractive errors." *Optometry and Vision Science*, 90 (11): 1304-1311.
11. Atchison DA, Valentine EL, Gibson G, Thomas HR, Oh S, Pyo YH, Lacherez P, **Mathur A** (2013). "Vision in water." *Journal of Vision*, 13 (11): 4, 1-8. doi:10.1167/13.11.4
12. **Mathur A**, Gehrmann J, Atchison DA (2013). "Pupil shape along the horizontal visual field." *Journal of Vision*, 13 (6): 3, 1-8. doi:10.1167/13.6.3
13. **Mathur A**, Atchison DA (2012). "Peripheral refraction patterns out to large field angles." *Optometry and Vision Science*, 90 (2): 140-147.
14. **Mathur A**, Atchison DA, Tabernero J (2012). "Effect of age on components of peripheral ocular aberrations." *Optometry and Vision Science*, 89 (7): E967-E976.
15. Charman WN, **Mathur A**, Scott DH, Hartwig A, Atchison DA (2012). "Specifying peripheral aberrations in visual science." *Journal of Biomedical Optics*, 17: 025004.
16. Verkicharla PK, **Mathur A**, Mallen EAH, Pope JM, Atchison DA (2012). "Eye shape and retinal shape, and their relation to peripheral refraction." *Ophthalmic and Physiological Optics*, 32 (3): 184-199.
17. de Gracia P, Marcos S, **Mathur A**, Atchison DA (2011). "Contrast sensitivity benefit of adaptive optics correction of ocular aberrations." *Journal of Vision*, 11 (12): 5, 1-10. doi:10.1167/11.12.5
18. Atchison DA, **Mathur A** (2011). "Visual acuity with astigmatic blur." *Optometry and Vision Science*, 88 (7): 798-805.
19. Atchison DA, **Mathur A**, Read SA, Walker MI, Newman AR, Tanos PP, McLennan RT, Tran AH (2010). "Peripheral ocular aberrations in mild and moderate keratoconus." *Investigative Ophthalmology and Visual Science*, 51 (12): 6850-6857.
20. **Mathur A**, Atchison DA (2010). "Influence of spherical intraocular lens implantation and conventional laser in situ keratomileusis on peripheral ocular aberrations." *Journal of Cataract and Refractive Surgery*, 36 (7): 1127-1134.
21. **Mathur A**, Atchison DA, Charman WN (2010). "Effects of age on peripheral ocular aberrations." *Optics Express*, 18 (6): 5840-5853. doi:10.1364/OE.18.005840
22. **Mathur A**, Atchison DA, Charman WN (2009). "Effect of accommodation on peripheral ocular aberrations." *Journal of Vision*, 9 (12): 20, 1-11. doi:10.1167/9.12.20
23. **Mathur A**, Atchison DA, Charman WN (2009). "Myopia and peripheral ocular aberrations." *Journal of Vision*, 9 (10): 15, 1-12. doi:10.1167/9.10.15
24. **Mathur A**, Atchison DA (2009). "Effect of orthokeratology on peripheral aberrations of the eye." *Optometry and Vision Science*, 86 (5): E476-E484.

25. **Mathur A**, Atchison DA, Kasthurirangan S, Dietz NA, Luong S, Chin SP, Lin WL, Hoo SW (2009). "The influence of oblique viewing on axial and peripheral refraction for emmetropes and myopes." *Ophthalmic and Physiological Optics*, 29 (2): 155-161.
26. **Mathur A**, Atchison DA, Scott DH (2008). "Ocular aberrations in the peripheral visual field." *Optics Letters*, 33 (8): 863-865.

CONFERENCE PUBLICATIONS (8)

1. Atchison DA, Suheimat M, **Mathur A**, Lister LJ (2016). "Component contributions to ocular aberrations." In Rozema JJ (Ed.) *Proceedings of the 8th European Meeting on Visual and Physiological Optics*, University of Antwerp, Belgium, pp. 121-123.
2. Verkicharla PK, Atchison DA, Suheimat M, Schmid KL, **Mathur A**, Mallen EAH, Wei X, Brennan NA. "Is retinal shape different in Asians and Caucasians? Estimation from peripheral refraction and peripheral eye length methods." *Investigative Ophthalmology and Visual Science*, 55: 3592.
3. Adnan, Suheimat M, **Mathur A**, Pritchard N, Edwards K, Efron N, Atchison DA (2014). "Effect of diabetes on amplitude of accommodation." In Iskander DR & Kasprzak T (Eds.) *Proceedings VII European / I World Meeting in Visual and Physiological Optics*, Wrocław, Poland, pp. 321-324.
4. Adnan, Efron N, **Mathur A**, Edwards K, Pritchard N, Suheimat M, Atchison DA. "Amplitude of accommodation in people with type 1 diabetes." *Visual & Physiological Optics meeting 2014*.
5. Atchison DA, **Mathur A** (2013). "Vision in water." *Clinical and Experimental Ophthalmology*, 41 (s1): 79.
6. Atchison DA, **Mathur A**, Scott DH, Hartwig A, Charman WN (2011). "Specifications for peripheral ocular aberrations." *Clinical and Experimental Ophthalmology*, 39 (s1): 110.
7. **Mathur A**, Atchison DA, Scott DH (2009). "Changes in peripheral aberrations of the eye induced by orthokeratology." *Clinical and Experimental Optometry*, 92 (1): 63.
8. **Mathur A**, Atchison DA, Scott DH (2008). "Peripheral higher order aberrations in emmetropes and myopes." *Investigative Ophthalmology and Visual Science*, 49 (5): 2838.

CONFERENCE PRESENTATIONS (21)

1. Adnan, Suheimat M, **Mathur A**, Pritchard N, Edwards K, Efron N, Atchison DA. "Effect of diabetes on amplitude of accommodation." VII European / I World Meeting in Visual and Physiological Optics, Wrocław, Poland (Aug 2014).
2. Verkicharla PK, Atchison DA, Suheimat M, Schmid KL, **Mathur A**, Mallen EAH, Wei X, Brennan NA. "Is retinal shape different in Asians and Caucasians?" ARVO annual meeting, Orlando, USA (May 2014).
3. Adnan, Atchison DA, Efron N, **Mathur A**, Edwards K, Pritchard N, Suheimat M. "Amplitude of accommodation in people with type 1 diabetes." 91st Annual Meeting of the American Academy of Optometry, Seattle, USA (Oct 2013).
4. Verkicharla PK, Atchison DA, Mallen EAH, Suheimat M, **Mathur A**, Schmid KL, Dunne MCM, Wei X, Brennan NA. "Retinal shape estimation from peripheral refraction and peripheral eye length methods." 14th International Myopia Conference, San Francisco, USA (Aug 2013).
5. Atchison DA, **Mathur A**, Gehrmann J. "Pupil shape along the horizontal visual field." 14th Scientific and 8th Educators' Meeting in Optometry, Melbourne, Australia (Sep 2012).
6. Verkicharla PK, **Mathur A**, Mallen EAH, Atchison DA. "Comparison of two partial coherence interferometry instruments for measuring peripheral eye lengths." 14th Scientific and 8th Educators' Meeting in Optometry, Melbourne, Australia (Sep 2012).
7. Atchison DA, **Mathur A**. "Peripheral refraction out to 60° from fixation using the Hartmann-Shack technique." 6th European Optical Society Meeting on Visual and Physiological Optics, Dublin, Ireland (Aug 2012).
8. **Mathur A**, Gehrmann J, Atchison DA. "Pupil shape along the horizontal visual field." Research Snapshot, School of Optometry and Vision Science, QUT, Brisbane, Australia (Aug 2012).
9. **Mathur A**, Atchison DA. "Effect of age on component contributions to peripheral ocular aberrations." Wavefront Congress, San Diego, USA (Feb 2012).
10. Atchison DA, **Mathur A**, Charman WN, Hartwig A. "Towards a standard for specifying peripheral ocular aberrations." 89th Annual Meeting of the American Academy of Optometry, Boston, USA (Oct 2011).
11. **Mathur A**, Atchison DA, Tabernero J. "Effect of myopia and age on the anterior corneal and internal contributions to the peripheral ocular aberrations." 89th Annual Meeting of the American Academy of Optometry, Boston, USA (Oct 2011).
12. **Mathur A**. "Peripheral aberrations in older vs. young eyes." 10th Aegean School in Visual Optics, Crete, Greece (Oct 2011).
13. de Gracia P, Marcos S, **Mathur A**, Atchison DA. "Benefit of adaptive optics correction of ocular higher order aberrations on contrast sensitivity." 8th International Workshop on Adaptive Optics for Industry and Medicine, Murcia, Spain (Jun 2011).
14. Atchison DA, **Mathur A**, Charman WN, Hartwig A. "Specifying peripheral aberrations in visual science." Wavefront Congress, Vancouver, Canada (Feb 2011).
15. **Mathur A**, Atchison DA. "Peripheral aberrations of the human eye." A-star journals forum, Institute of Health and Biomedical Innovation, QUT, Brisbane, Australia (Dec 2010).
16. **Mathur A**, Atchison DA. "Changes in peripheral ocular aberrations due to spherical intraocular lens implantation and conventional laser in situ keratomileusis." 88th Annual Meeting of the American Academy of Optometry, San Francisco, USA (Nov 2010).

17. **Mathur A**, Atchison DA. "Peripheral aberrations in myopia." 13th International Myopia Conference, Tübingen, Germany (Jul 2010).
18. Atchison DA, **Mathur A**. "To measure peripheral aberrations in different refractive conditions." Wavefront Congress, San Francisco, USA (Feb 2010).
19. **Mathur A**, Atchison DA. "Effect of accommodation and ageing on peripheral ocular aberrations." Australasian Ophthalmic and Vision Science Meeting, ANU, Canberra, Australia (Dec 2008).
20. **Mathur A**, Atchison DA, Scott DH. "Change in off-axis monochromatic aberrations and peripheral refraction induced by orthokeratology." Asia-Pacific Conference on Vision, The University of Queensland, Brisbane, Australia (Jul 2008).
21. **Mathur A**, Atchison DA, Scott DH. "Effect of orthokeratology on off-axis monochromatic aberrations." Australasian Ophthalmic and Vision Science Meeting, ANU, Canberra, Australia (Dec 2007).

REPORTS TO INDUSTRY PARTNER (CARL ZEISS VISION)

1. **Mathur A**, Atchison DA (2013). *Blur limits and uncorrected visual acuity with age*. QUT, Brisbane, Australia.
2. Atchison DA, **Mathur A** (2013). *Interactions between changes in pupil size/position and the eye's optical aberrations. Part 2: aberrations and pupil position*. QUT, Brisbane, Australia.
3. **Mathur A**, Atchison DA, Gehrmann J (2013). *Interactions between changes in pupil size/position and the eye's optical aberrations. Part 1: pupil size and position*. QUT, Brisbane, Australia.
4. Atchison DA, **Mathur A**, Varnas S (2012). *Visual performance with lenses correcting peripheral refractive errors*. QUT, Brisbane, Australia.
5. Atchison DA, **Mathur A** (2010). *Visual acuity with astigmatic blur away from wavefront guided corrections*. QUT, Brisbane, Australia.

RESEARCH FUNDING — \$310,138

Australian Research Council Linkage Grant LP100100575	\$289,046	2010 - 2013
With Prof. David Atchison (QUT) and Saulius Varnas (Carl Zeiss Vision, Australia)		
IHBI Early Career Research Grant	\$9,092	2012
Institute of Health and Biomedical Innovation, QUT		
QUT School of Optometry Research Development Grant	\$6,500	2010
QUT School of Optometry Research Development Grant	\$3,500	2011
QUT School of Optometry Research Development Grant	\$2,000	2013
Weymouth Student Travel Fellowship	\$700	Nov 2010
American Academy of Optometry, USA		
Travel Grant	\$1,000	Mar 2008
Association for Research in Vision and Ophthalmology, USA		

AWARDS

Carla Patterson Award	2011
IHBI, QUT — highest ranked publication from the Vision Improvement domain	
Second best outgoing optometry student	2004
Bausch & Lomb School of Optometry, L.V. Prasad Eye Institute, India	

SCHOLARSHIPS

QUT Fee Waiver Scholarship for PhD	~ \$72,000	2006 - 2009
QUT Research Capacity Building Award (living allowance)	~ \$61,000	2006 - 2009
QUT Faculty of Health Postgraduate Research Scholarship	~ \$6,300	2009
QUT Postgraduate Research Write-Up Scholarship	~ \$6,300	2009
QUT Optometry Write-Up Scholarship	~ \$1,600	2009
Undergraduate tuition fee waivers for academic performance, four consecutive years (Bausch & Lomb School of Optometry, India)	Rs 120,000	2000 - 2003

TEACHING APPOINTMENTS (14)

Optometry programme — Senior Lecturer Queensland University of Technology	2025
Ophthalmic Optics 4 (OPB353) — 2nd year QUT School of Optometry and Vision Science	Jul - Oct 2013
Topics in Optometry 7 & 8 (OPB750) — 4th year Project: Underwater vision QUT School of Optometry and Vision Science	Feb - Jun 2013
Ophthalmic Optics 4 (OPB353) — 2nd year QUT School of Optometry and Vision Science	Jul - Oct 2012
Ophthalmic Optics 3 (OPB353) — 2nd year QUT School of Optometry and Vision Science	Feb - Jun 2012
Topics in Optometry 7 & 8 (OPB750) — 4th year Project: Effect of diabetes on amplitude of accommodation QUT School of Optometry and Vision Science	Feb - Dec 2011
Ophthalmic Optics 3 (OPB353) — 2nd year QUT School of Optometry and Vision Science	Feb - Jun 2011
Ophthalmic Optics 4 (OPB453) — 2nd year QUT School of Optometry and Vision Science	Jul 2010 - Mar 2011
Ophthalmic Optics 3 (OPB353) — 2nd year QUT School of Optometry and Vision Science	Feb - Jun 2010
Optometry 4 (OPB450), Visual Science 4 (OPB451), Ocular Anatomy & Physiology 4 (OPB452) QUT School of Optometry and Vision Science	Jul 2008 - Mar 2009
Optometry 3 (OPB350) QUT School of Optometry and Vision Science	Feb - Jun 2008
Topics in Optometry 7 & 8 (OPB750) — 4th year Project: Peripheral ocular aberrations in mild and moderate keratoconus QUT School of Optometry and Vision Science	Feb 2007 - Jan 2008
Topics in Optometry 7 & 8 (OPB750, OPB751) — 4th year Project: The influence of oblique viewing on axial and peripheral refraction QUT School of Optometry and Vision Science	Feb 2006 - Jan 2007
Visual Optics — Lecturer and course coordinator, cohort of ~60 Bausch & Lomb School of Optometry, LVPEI / BITS, India	Aug 2004 - Feb 2005

RESEARCH SUPERVISION

Postgraduate: 4 PhD students — 1 co-supervised, 3 mentored, all at IHBI / School of Optometry, QUT.

Undergraduate: 5 fourth-year optometry research project groups of 4-5 students each, across 2006, 2007, 2008, 2011, 2012 and 2013.

PEER REVIEW

Reviewer for six international journals: *Optometry and Vision Science*; *Investigative Ophthalmology and Visual Science*; *Ophthalmic and Physiological Optics*; *Indian Journal of Ophthalmology*; *Journal of Modern Optics*; *Clinical and Experimental Optometry*.

RESEARCH COLLABORATIONS

Prof. David A. Atchison (Queensland University of Technology, Australia); Prof. Neil Charman (University of Manchester, England); Prof. Larry Thibos (University of Houston, USA); Prof. Susana Marcos (Instituto de Óptica, Spain); Prof. Edward Mallen (University of Bradford, UK); Timo Kratzer (Carl Zeiss Vision, Germany); Saulius Varnas (Carl Zeiss Vision, Australia); Dr Andrew Lambert (UNSW @ ADFA, Australia); Dr Lee Lenton (Eye Centre River City, Brisbane, Australia); Luke Arundel (John Mountford Optometrists, Brisbane, Australia); Dr Sanjeev Kasthurirangan (Abbott Medical Optics Inc., USA); Dr Huangqing Guo (National University of Ireland, Ireland); Dr Juan Tabernero (Universidad de Murcia, Spain); Dr Dion Scott (The University of Queensland, Australia); Dr Jos J. Rozema (Universitair Ziekenhuis Antwerpen, Belgium).

**VOLUNTARY & COMMUNITY
CONTRIBUTIONS**

Development of talking books for people with vision impairment L.V. Prasad Eye Institute, Hyderabad, India	2001 - 2006
School vision screening — Chirec Public School programmes L.V. Prasad Eye Institute, Hyderabad, India	2002 - 2003
Training and educating ophthalmic field workers Sightsavers International, Madhya Pradesh, India	Feb 2003
Community vision screening and World Sight Day exhibition L.V. Prasad Eye Institute, Hyderabad, India	2002

REFEREES

Academic and clinical referees available on request.