



Amandeep Singh Josan

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EDUCATION AND TRAINING

Physics PhD

University of Nottingham [01/10/2006 – 01/10/2010]

Address: School of Physics and Astronomy Particle theory group, University park, NG7 2RD Nottingham (United Kingdom)

<https://www.nottingham.ac.uk/physics/research>

Field(s) of study: Cosmology and high energy particle physics

Thesis: Constraints on the power spectrum of primordial perturbations from small-scale structure

Mathematics: Master of Advanced Study (MASt)

University of Cambridge [01/10/2005 – 01/09/2006]

Address: Faculty of Mathematics Wilberforce Road, CB3 0WA Cambridge (United Kingdom)

<https://www.maths.cam.ac.uk/postgrad/part-iii/prospective.html>

Field(s) of study: Mathematics , Theoretical Physics

Physics and Astronomy BSc(Hons)

The University of Manchester [01/10/2002 – 01/10/2005]

Address: Oxford Road, M13 9PL Manchester (United Kingdom)

<https://www.physics.manchester.ac.uk/>

Field(s) of study: Physics and Astronomy

Final grade : First class honours

Thesis: Gravitational waves

Awarded Platt prize for outstanding achievement

Optometry MCOptom

College of Optometrists [01/09/2000 – 01/07/2002]

Address: The Institute of Optometry 56-62 Newington Causeway, SE1 6DS London (United Kingdom)

<http://www.ioo.org.uk/>

Field(s) of study: Optometry

Optometry BSc(Hons)

Cardiff, University of Wales [01/09/1997 – 01/06/2000]

Address: Cardiff University Eye Clinic Maindy Road, Cathays, CF24 4HQ Cardiff

<https://www.cardiff.ac.uk/optometry-vision-sciences>

Field(s) of study: Optometry

WORK EXPERIENCE

Specialist research and clinical Optometrist

Oxford University Hospitals NHS Foundation Trust, John Radcliffe Hospital [29/09/2019 – Current]

City: Oxford

Country: United Kingdom

- Perform a variety of visual function tests on clinical trial patients undergoing novel retinal gene therapy treatments for a range of inherited retinal conditions including medical imaging such as Optical Coherence Tomography (OCT).
- Develop new concepts or tools which may improve upon existing visual function testing
- Undertake data analysis of medical information including medical image pathology detection using artificial intelligence algorithms on OCT, fundus autofluorescence and colour fundus images
- Perform meta-analyses of current research investigating efficacy of existing treatments for ocular conditions

Community Optometrist

Robert Stanley Opticians [01/09/2017 – 20/09/2019]

City: Oxford

Country: United Kingdom

Community Optometrist

Specsavers Opticians [01/12/2010 – 01/10/2017]

City: Alfreton

Country: United Kingdom

Clinical supervisor

Aston University [01/12/2014 – 01/04/2016]

City: Birmingham

Country: United Kingdom

- Clinic supervisor to third year students of Optometry

LANGUAGE SKILLS

Mother tongue(s):

English

Other language(s):

Panjabi; Punjabi

LISTENING C1 READING A1 WRITING A1

SPOKEN PRODUCTION B2 SPOKEN INTERACTION B2

DIGITAL SKILLS

Advanced programming skills

Python / R (statistical programming) / C++ / FORTRAN 77/90/95 / Matlab

PUBLICATIONS

Microperimetry hill of vision and volumetric measures of retinal sensitivity

[2021]

<https://tvst.arvojournals.org/article.aspx?articleid=2772689>

Characterising visual fields in RPGR-related retinitis pigmentosa using Octopus static-automated perimetry

Publication pending – Clinical and Experimental Ophthalmology

Structural and Functional Characteristics of Colour Vision Changes in Choroideremia

[2021]

Publication pending – Frontiers in Aging Neuroscience

Low Luminance Visual Acuity in Choroideremia and RPGR-associated Retinitis Pigmentosa.

[2021]

<https://tvst.arvojournals.org/article.aspx?articleid=2772299>

Low luminance visual acuity as a clinical measure and clinical trial outcome measure: a scoping review

[2021]

<https://pubmed.ncbi.nlm.nih.gov/33403668/>

Clinical applications of microperimetry in RPGR-related retinitis pigmentosa: a review

[2021]

<https://pubmed.ncbi.nlm.nih.gov/33783139/>

Gamma rays from ultracompact minihalos: Potential constraints on the primordial curvature perturbation

[2010]

<https://journals.aps.org/prd/abstract/10.1103/PhysRevD.82.083527>

Constraints from primordial black hole formation at the end of inflation

[2010]

<https://journals.aps.org/prd/abstract/10.1103/PhysRevD.82.047303>

Generalized constraints on the curvature perturbation from primordial black holes

[2009]

<https://journals.aps.org/prd/abstract/10.1103/PhysRevD.79.103520>

VOLUNTEERING

Volunteer work - Vision Aid Overseas

[Zambia, 14/03/2014 – 10/04/2014]

- Volunteer Optometrist providing eyecare through outreach programmes in remote regions within Zambia

Volunteer work - Vision Aid Overseas

[Ghana, 26/03/2011 – 12/04/2011]

- Volunteer Optometrist providing eyecare through outreach programmes in remote regions within Ghana
- Teaching medical students from Accra core Optometric and Ophthalmological principles in support of local eyecare development