

# Curriculum Vitae

James Kwan Yau ONG  
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## Personal details

Born in Exeter, U.K. on 7 August 1978  
- Nationalities: Australian, British  
Married, with two children

## Education

### **2003 - 2007 (University of Potsdam, Germany)**

- Doctoral studies in applied mathematics (Dr. rer. nat.)
- Dissertation: "The predictability problem", which examines the role of upcoming word predictability in a model of eye movements during reading

### **1999 - 2000 (The University of Western Australia, Australia)**

- Master of Science (Research) in mathematics (completed in 2002)
- Dissertation: "Synchronisation of two chaotic delay differential systems", where the synchronisability of a pair of chaotic laser systems was established analytically and numerically

### **1993 - 1998 (The University of Melbourne, Australia)**

- Bachelor of Science (Honours) in mathematics (completed in 1998)
- Bachelor of Optometry (completed in 1996)

## Employment history

### **2011 - present (ASSORT Pty. Ltd., Australia)**

- Clinical researcher and software engineer

### **2008 - 2011 (Upper Austria University of Applied Sciences, Austria)**

- Postdoctoral researcher
- Lecturer (Biomedical signal analysis; Statistics)

### **2006**

- Language editor for "Lectures in Supercomputational Neuroscience: Dynamics in Complex Brain Networks (Understanding complex systems)" (Springer, 2007)

### **2005 (University of Potsdam, Germany)**

- Tutor (Statistical analysis with MATLAB and R)

**2001 - 2003 (Defence Science & Technology Organisation, Australia)**

- Operational analyst

**1999 - 2000 (The University of Western Australia, Australia)**

- Tutor (Basic statistics)
- Assistant lecturer (Integer programming)

**1997 - 1998**

- Optometrist (part-time)

**1996 - 1998**

- Organised and ran a maths mentor scheme for high school students
- Private tutor for high school and university students

**1996 - 2011 (NewVision Clinics, Australia)**

- Mathematical consultant

## **Skills**

### **Computer**

- Proficient with Windows, OS X and UNIX
- Programming, modelling, scripting
  - C, C++, Delphi
  - php, Javascript, JQuery
  - HTML, XHTML
  - SQL
  - MATLAB, Mathematica
  - Minitab, R
  - Analytica, EXTEND
  - shell scripting, awk
  - UML
- Word processing (MS Word, LaTeX)
- Spreadsheets (MS Excel)

### **Verbal**

- Lecturing, tutoring, presenting research at workshops and conferences
- Communicating as a health-care practitioner
- Communicating as a researcher and educator in mathematics
- Foreign languages: German (fluent), French (good), Chinese (basic)

## Publications

Alpins, N., Ong, J. K. & Stamatelatos, G. (2013). Refractive surprise after toric intracocular lens implantation—a graphical analysis, *Journal of Cataract and Refractive Surgery*, accepted.

Alpins, N., Ong, J. K. & Stamatelatos, G. (2012). [New method of quantifying corneal topographic astigmatism that corresponds with manifest refractive cylinder](#), *Journal of Cataract and Refractive Surgery*, 38(11), 1978–1988.

Egan, C. (2012). [A modified approach to muon-catalyzed fusion, employing helium-3 as fuel](#), *Nuclear Instruments and Methods in Physics Research Section B: Beam Interactions with Materials and Atoms*, 287, 103–108. [I performed the simulations for the paper.]

Ong, J. K. Y. & Haslwanter, T. (2010). [Measuring torsional eye movements by tracking stable iris features](#), *Journal of Neuroscience Methods*, 192(2), 261–267.

Haslwanter, T., Platz, M. & Ong, J. K. Y. (2009). Optimizing video-oculography systems by simulating the effect of slippage artifacts, *Proceedings of 21st European Modeling and Simulation Symposium EMSS 2009*, Tenerife, Spain, 2009.

Haslwanter, T. & Ong, J. K. Y. (2009). [Applying knowledge—Challenges in bringing scientific advances to dizzy patients](#), *Annals of the New York Academy of Sciences*, 1164, 309–315.

Haslwanter, T. & Ong, J. K. Y. (2008). New medical technologies: The journey from the laboratory to the patient, *Proceedings FH Science Day 2008*, Linz, Austria, 123–128.

Ong, J. K. Y. & Kliegl, R. (2008). [Conditional co-occurrence probability acts like frequency in predicting fixation durations](#), *Journal of Eye Movement Research*, 2(1):3, 1–7, <http://www.jemr.org/>.

Ong, J. K. Y. (2007). [The predictability problem](#) (Doctoral dissertation). Available from <http://nbn-resolving.de/urn:nbn:de:kobv:517-opus-15025>.

## Referees

Available on request