

STEPHEN SCOTT NURSE
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E-mail: cesnur@iimetro.com.au
Born: 30th May 1960, Married with one son

COURSES AND QUALIFICATIONS

- 2017 Attended Monash "Validator" Business startup course.
- 2017 Industrial Design Master's Degree, Monash University
- 2011 Regal Beloit Green Belt Qualification (Manufacturing Efficiency)
- 2005 Welding Course, Richmond Tafe (30 contact hours)
- 1996 Plastics Design Course, Casey Tafe (108 Contact Hours)
- 1995 Grad. Dip. Advanced Manufacturing Technology, Monash University, Quality / ISO9001, Cad/Cam, Statistical Process Control
- 1989 Mittelstufeprüfung, Goethe Institut German Language Qualification
- 1982 Mechanical Engineering Degree, Melbourne University
- 1977 Higher School Certificate, Melbourne Grammar School

PATENTS AND DESIGN REGISTRATIONS

Applied for six Australian Cycle-related patents, named in two Australian Electric-motor-related Patents, three registered designs for Tribo construction set. Details can be seen [here](#).

STRENGTHS

- * Quick to understand, model and express engineering information
- * Capable in workshop (ie Lathe, Carpentry, 3D printer operation, Braze Welding)
- * Articulate and able to write concise English
- * Proficient in 2 & 3d CAD, spreadsheets, wordprocessing, research skills including accessing research papers online and citing using Endnote.
- * Experience in industry and Academia

WORK ASPIRATIONS: Enjoy work, learn, grow and contribute to society

PEER REVIEWED RESEARCH PAPERS:

[Leaning Trikes using Rear Axle Pedal Crank Mechanism](#) at hupi.org
[Evolution of Cycles from Front Wheel Drive to Delta Tilting Trike](#) at atrf.info
[Tilting Human Powered Trikes: Principles, Designs and New Developments](#) at atrf.info,
[Simple Leaning Trikes](#) Industrial Design Master Thesis

See my [website](#) for further papers, publications and Cad file downloads

PROFESSIONAL WORK

Since July 2017: Home based carer. My wife Christine is recovering from shoulder surgery, is unable to drive and I have been assisting her with everyday tasks.

Jan 2015 – Jan 2017 Scholarship funded Monash University Student, building, documenting and riding 6 leaning trikes (Human Powered Vehicles) answering the research question Can DIY leaning trikes lead to sustainable transport?. [Link to assessment exhibition notice.](#)

Aug 1994 - Dec 2014 Regal Beloit / CMG: Mechanical Engineer, Electric Motor Design and Manufacture

- * Manager for design of plastic body 1.5 kw axial flux pool pump [motor](#) including \$600,000 budget, travel to Thailand, 3d Cad, rapid prototyping & tooling, electronics manufacturing.

- * Design of Steel, Plastic and Aluminum machined / moulded / cast parts and finished products using AutoCAD LT and Solidworks, [Speedmaster](#) motor design

- * Sourced parts for motors, produced BOMS & manufacturing instructions

Apr 2000 - Jan 2002 Trimcast Rotomoulders Design Engineer

- * Assisted with design of 7 metre diameter, six trolley rotomoulding machine

- * Design of rotomoulded boxes and NC Routed foam for storage of aviation, military and medical equipment

Jan - July 1994 Monash University (Caulfield), AutoCad Instructor, Part Time

- * For 3rd year Mechanical / Industrial Eng students, lecture / set / mark assignments and course content

Jun 1993 - Aug 1994 Creating Quality Documents/Cad Drafting, So-Rite Engineering: Metals Fabrication 20 hours per week

- * ISO quality, calibration, maintenance procedures

- * CAD work for production (HP ME10)

- * Operation and repair of machinery

Nov 1989 - Aug 1994 Mechanical Engineer, Wajax Australasia: Pump Manufacturer, Full Time

- * Writing ISO9002 quality procedures

- * Manually drawing pump-related components & assemblies.

- * Testing and commissioning diesel and electric pumpsets

Mar 1984 - Mar 1989 Technical Assistant and Fitter Heidelberg Australia, Full-Time (sellers, importers and servicers of printing machinery.)

- * Project management, repair and installation of printing machines.

- * Technical correspondence with German Principals

- * German Language and machine-related training with Goethe Institut and Manufacturers in Germany

OTHER WORK

- * Draftsman, Markhall Engineering. Steel Building Fabrications
- * Printers Assistant, Brown Prior Anderson
- * Student Engineer, Alcoa, Pt. Henry & Vicrail Newport.
- * Computer Operation and Management, Typing 2000 (Home-business, partnership with my wife Christine)

NON-ACADEMIC WEB PUBLICATIONS:

Website, Blog: [Modular Bikes](#), Recumbent Cycling Related
YouTube : [Films](#) featuring homemade cycles and 3D printed items

PUBLICATIONS / COMPETITIONS / EXHIBITIONS / INTERVIEWS

2004: [Spezi Folding Recumbent Competition](#) in Germany
2009: Self-Published book "An Illustrated Guide to the Cycle Zoo", ISBN 9781921488085
2010: BikeRodnKustom [interview](#)
2017: [Timber Leaning Trike](#) entry in Dangerous Designs timber design competition
2017: Timber Leaning Trike entry / for sale in [Fringe Furniture 31](#).
Several [Velovision](#) articles about bikes
OzHpv Newsletter, "[Huff](#)": Numerous Contributions, Current Editor

PERSONAL and COMMUNITY INTERESTS:

Bicycling: Volunteer for [WeCycle](#) cycle charity (refurbish cycles for those who need them) and [OzHpv](#) Human Powered Vehicle organisation (Ex-President, Newsletter Editor, Committee Member, organiser National Human Powered Vehicle Championships, 2014, 2017, official at record attempts)
Distance cycling (Audax) on recumbents I've made, ie 200k per day and above.

Surfing: Keen Amateur Surfer
Reading: Novels and technical magazines
Internet: For e-mail contact with family & friends, researching bikes & other interests.
If I have to: Home Renovation and Maintenance, Gardening

REFEREES:

Please ring or email if referees are required.