

PO Box 5731
Helderberg
7135

Office
Home

(021) 808-4409
(021)855-3657

CURRICULUM VITAE
of
JOHANN TREURNICHT

TECHNICAL EXPERTISE

As the result of the various projects and positions I had been involved in since 1978, I have good current capabilities in the following fields:

- Lecturing undergraduate and graduate
- System Engineering
- Software Development
- Computer Design
- Mathematical Analysis and Design
- Control System Analysis and Design
- Integration

CURRENT CONTRIBUTION

Undergraduate: Since 1998 I have given undergraduate classes in Control Systems and Electro technique (2nd-year) at the Electrical and Electronic Department, Faculty of Engineering.

PostGraduate: I have given a number of post-graduate classes in Control Systems (pre-dominantly in Robust Control). I have also managed the underwater research at the Department. Two MSc students - Renaldo du Pisani and Karel Malan (1/2) were delivered during 2013; and in previous years Konrad Friedrich (2011), LA Hendriks (2009), G de Villiers (2009), L Herselman (2007) and J Potgieter (2007) completed their MSc studies. On the postgrad level I have been able to fund my own projects as well as projects allocated to other study leaders.

Research: I have given talks at IASSA conference during 2013 and 2012. I am currently busy with my PhD studies on the scaling aspects of a quad rotor aircraft.

Professional Design: I am currently managing the SLADE 2e vehicle at the department. My contribution was to provide a fully funded and well-managed project on which other colleagues and graduate engineers could implement research ideas for advancing the ESL technology.

Department: My recent contributions were the PCB facility, automation of the CAD to machining procedures, the control systems tutors for the post-grad and undergrad laboratories.

EXPERIENCE

1998-PRESENT I am employed by the University of Stellenbosch as a senior lecturer in the Engineering Faculty, Electrical and Electronics Department (computer and control systems group).

- My lecturing subjects included all the undergraduate control systems courses and robust control post graduate courses.
- I am also providing engineering consultation to industry with projects ranging from micro-satellite sensor and actuator development to specialized stabilization and control systems for military and other clients. I am currently project manager for the SLADE2e UAV.

1995-1998 I was employed by Reumech OMC (now Vickers OMC) as the Engineering Manager for Tracked Armour and later as gun stabilization specialist. During this period I was seconded part of the time to Reunert Defence Logistics (formerly ESD) to help solve gun control problems.

1994 -1995 I formed my own close corporation to perform system engineering and analysis consulting work for clients. At this time I was also involved in the Rooivalk bid to the UK.

1984-1994 I participated in the concept phase for the mechanized anti-aircraft gun system and was appointed System Engineer to the 35 mm mechanized anti-aircraft gun system for the definition and development phases of this major development programme.

1982-1984 During this period I was involved in a number of concept studies involved in simulation, design of guidance laws, airborne trackers and a hydraulic servo demonstrator. I was also a section manager and consultant to young engineers.

1981-1982 During this period Kentron sent me to Cranfield Institute of Technology, Bedford, England to obtain an MSc.

1979-1981 The autopilot for the ZT3 missile was developed in two phases: an analogue design that was plagued by drift was replaced by a digital design. This design was packaged to operate with the very high launch shock plus high EMC environment.

1978-1979 I started my career at Kentron and my first task was to provide servos and a power supply from an alternator for a concept RPV vehicle. The power supply was then refitted to replace the power supply on another weapon system.

EMPLOYMENT RECORD

1998-Present I am employed by the University of Stellenbosch.

1995-1998 I was employed by Reumech OMC.

1994-1995 I formed my own close corporation.

1978-1994 I was employed by Kentron.

1984-1994 I was part of the Air-defence group at Kentron.

1978-1984 I was part of the missile electronics group at Kentron.

QUALIFICATIONS

1981-1982 M Sc Engineering (Aerospace), Cranfield Institute of Technology, Bedford, ENGLAND.
My thesis dealt with digital control system design.

1972-1976 Hons B Sc Electronics, University of Stellenbosch. My final project was a communications link to the mainframe computer.

1966-1971 Matric Exemption with four distinctions, John Orr Technical High School, Johannesburg.
My trade subject was radiotronics.

HONOURS

1992 Armscor Chairman's award (Kentron, Armscor, SA Army) for SPAAG project

1988 Chief of the Army Commendation.

COURSES

I completed a number of in-house courses:

- "Kentron Bestuurskurses"

- "Onderhandelingsvaardighede"

MILITARY SERVICE

1977-1978 After basic training, I was placed as a 1st Lt. at 5 Air Depot, AFB Waterkloof and performed a variety of tasks under the supervision of a resident Fuchs engineer. The tasks included a fuel metering sensor, runway barrier control, Cyrano radar modifications and a Hunter radar automatic-frequency loop replacement.

LANGUAGES

I am fluent in Afrikaans and English. My home language is Afrikaans.

HOBBIES

Cabinet-making

PERSONAL

Birthdate 11 December 1953 in Pretoria. I am a South African citizen. My current home address is 24 Topaz street, Emerald View, Somerset West, 7135; of which I am the owner. My home Telephone/Fax number is (021)-855-3657.

I have been married to Henrietta for 33 years and have 3 grown-up children.

EMPLOYMENT STATUS

I am currently employed by the University of Stellenbosch.