Joash Nicholas Naidoo

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 linkedin | github

EDUCATION

UNIVERSITY OF CAPE TOWN
Feb 2020-Mar 2021

M.Sc (Eng) in Electrical Engineering (Awaiting Results)
- Characterizing Single Event Upsets on a custom high speed optical transceiver card for a large experiment (ATLAS) at the CERN Large Hadron Collider
- Project based on the development of VHDL/Vivado firmware and LabView tools
- Contributed documentation for ATLAS-DESY team, a German National Lab in Hamburg

UNIVERSITY OF CAPE TOWN
2016-2019

B.Sc (Eng) in Electrical and Computer Engineering
- Graduated within the minimum duration and with an average of 65%+ (honours)
- Courses in Control Systems, Embedded Systems, Computer Science, Signals and Systems and Project Management
- Final Year Project: Edge Computing with FPGAs, developing BalenaOS for Zynq based MiniZed board

SKILLS

PROGRAMMING LANGUAGES	*Experienced:* VHDL	C/C++	Java *Fluent:* Python	LABVIEW	MATLAB	C#
SOFTWARE DEVELOPMENT	GIT	CLI	BASH	GCC	Make
TOOLS & LIBRARIES	Vivado	Simulink	Visual Studio Community	Numpy	Jupyter	Bitbucket
OPERATING SYSTEMS	GNU/Linux	Windows
HARDWARE	Kintex7 KC705 Evaluation Board	Zynq 7Z007S	STM32	Raspberry Pi 3
SPOKEN LANGUAGES	*Native:* English

EXPERIENCE

IDS (PTY) LTD
2021-Current / Bedfordview

- Junior full stack developer building business solutions in Angular and Microsoft ASP.NET

IDS (PTY) LTD
2019 / Bedfordview

- Passed the Microsoft Certified Exam 70-483 Programming in C#

CPUT PRACTICAL TRAINING PROGRAMME
2017 / Cape Town

- Introduction to Arc Welding, CNC Programming, Lathe Work and Basic Hand Tool Skills

IDS (PTY) LTD
2017 / Park Town

- Intern developing a SQL Server Integration Services package to validate company records from the time-sheet system and transfer valid records to their database

PUBLICATIONS

Recent Results from the first lpGBT-based prototype of the End-Of-Substructure card for the ATLAS ITk, IEEE Nuclear Science Symposium & Medical Imaging Conference, 2020
- Presented Poster at the 27th international conference

ROLES OF RESPONSIBILITY

NATIONAL STUDENT CHAIRPERSON FOR ENGINEERS WITHOUT BORDERS SOUTH AFRICA
2019

- Represented all Student Chapters across the country on the EWBSA board

SECRETARY GENERAL FOR ENGINEERS WITHOUT BORDERS UNIVERSITY OF CAPE TOWN
2018

- Responsible for the communication and general administration of the EWB-UCT Chapter

Volunteer Experience

Piloted Maths and Science Tutoring Program
2017-2019 / Claremont

• Weekly program started collaboration between EWBUCT and Magic School Non-Profit Organizations to help tutor High School students struggling in Maths and Science

Project Member for Playing with Solar
2018-2019 / Khayelitsha

• Project in collaboration with Project 90 teaching High School students basic circuitry, soldering skills and building their own solar power boxes

Project Member for Mama-Afrika
2019 / Gugulethu

• EWBUCT initiative to design and build low-cost fence around vulnerable daycare centre in Nyanga, Gugulethu

Awards

UCT PLUS Bronze Community Service Leadership
2019

• Awarded for 35+ hours of community service

Referees

Dr. Marcel Stanitzki
marcel.stanitzki@desy.de
Project Leader for EoS-DESY team

Dr. Jane Wyngaard
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Masters and Undergraduate Supervisor, Department of Electrical Engineering

Dr. James Keaveney
james.keaveney@uct.ac.za
Masters Supervisor, Department of Physics

Mr. Irshaad Vawda
irshaad.vawda@ewbsa.org
Engineers Without Borders South Africa CEO