

# Joash Nicholas NAIDOO

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[in linkedin](#) | [github](#)

## EDUCATION

### UNIVERSITY OF CAPE TOWN

*Feb 2020-Mar 2021*

M.Sc (ENG) IN ELECTRICAL ENGINEERING (IN PROGRESS)

- 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, Hamburg

### UNIVERSITY OF CAPE TOWN

*2016-2019*

B.Sc (ENG) IN ELECTRICAL AND COMPUTER ENGINEERING

- Graduated with 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

<b>PROGRAMMING LANGUAGES</b>	<b>Experienced:</b> Java   C/C++   VHDL <b>Fluent:</b> LABVIEW   MATLAB   Python   C#
<b>SOFTWARE DEVELOPMENT</b>	GIT   CLI   BASH   GCC   Make
<b>TOOLS &amp; LIBRARIES</b>	Vivado   Simulink   Visual Studio Community   Numpy   Jupyter   Bitbucket
<b>OPERATING SYSTEMS</b>	GNU/Linux   Windows
<b>HARDWARE</b>	Kintex7 KC705 Evaluation Board   Zynq 7Z0075   STM32   Raspberry Pi 3
<b>SPOKEN LANGUAGES</b>	<b>Native:</b> 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 IpGBT-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

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### 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

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### UCT PLUS BRONZE COMMUNITY SERVICE LEADERSHIP

*2019*

- Awarded for 35+ hours of community service

## REFEREES

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Dr. Marcel Stanitzki

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Project Leader for EoS-DESY team

Dr. Jane Wyngaard

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Masters and Undergraduate Supervisor, Department of Electrical Engineering

Dr. James Keaveney

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Masters Supervisor, Department of Physics

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Engineers Without Borders South Africa CEO