SHEKHAR SINGH

Mechatronics Engineering Graduate

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A UCT graduate in Mechatronics Engineering with a background in electromechanical design, and software engineering. Gained experience and training in Electrical and Mechanical engineering. In possession of strong leadership and communication skills due to numerous leadership positions occupied from a young age.

PROFESSIONAL EXPERIENCE

Microsoft AppFactory Intern
OptiSolutions

📅 Dec 2020 – Present   📍 Cape Town, South Africa

- I joined the Microsoft AppFactory internship programme through OptiSolutions, where I've gained more software development experience. Achieved skills in Node, Git/Github, PowerApps, Azure, and app development.

Faculty Tutor
University of Cape Town (EBE Electrical department & EBE Mechanical Department

📅 Feb 2017 – Dec 2020   📍 Cape Town, South Africa

- Tutored in mechanical and electrical design using various design programmes (including SolidWorks, AutoCAD, Altium Design, and KiCAD). I've also lectured some classes, and in doing so, I've gained teaching experience and further knowledge in each programme.
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Academic Researcher
University of Cape Town (EBE Electrical department)

📅 Dec 2019 – Jan 2020   📍 Cape Town, South Africa

- Worked as a student researcher for a professor in an academic project regarding ultrasonic applications for medical use.

Apprentice
ND Engineering

📅 Jun 2016 – Aug 2016   📍 Durban, KZN

- Worked as an apprentice with a group of other university students in which we trained in various departments in the this industrial company. I further developed my skills in fitting, turning and welding, as well as learned new skills in the manufacturing and assembly departments.

Apprentice
Intech Instrumentation

📅 Nov 2015 – Jan 2016   📍 Durban, KZN

- I worked under a team of mechanical and instrumental engineers, where I first learned trade skills involving fitting, turning, and welding.
- The company has specialized engineers of various fields, and with the workshop based in the Shell Chemicals PTY LTD plant site, I furthered my knowledge of electrical and instrumentation by working under the electrical team to maintain the electrical aspects of the plant.

SKILLS

PROFESSIONAL:

Leadership abilities | Creativity | Interpersonal skills | Critical thinking | Problem solving | Customer service skills | Teamwork skill | Communication | Adaptability | Conflict Resolution | Decision making | Organization

ENGINEERING:

Welding | Fitting | Turning | PCB design | Electronic design | Mechanical design | Controls System design

PROGRAMMING:

C/C++ | Embedded Systems | Python | HTML/HTML5 | CSS | Javascript | jQuery | MATLAB | Node/Express | LaTeX | SQL

SOFTWARE:

Microsoft Office Suit | MATLAB/SIMULINK | PowerApps | Azure | SolidWorks | AutoCAD | Fusion360 | Adobe Illustrator | Adobe Photoshop | Adobe Lightroom | Adobe After Effects | Adobe Media Encoder | Autodesk Sketchbook

HOBBIES:

Photography | Photo editing | Videography | Graphics design | UX design

COMMUNITY & VOLUNTEER WORK

Community Outreach
(Various organizations)

📅 2013 – Present   📍 Cape Town & Durban, South Africa

- Volunteered my services in many feeding schemes in different organizations over the years. These organizations include religious and academic societies, outreach programmes at the university, and small charity drives with my family over the festive period.

Animal Rescue
SPCA & LEAPs

📅 Feb 2017 – Dec 2019   📍 Cape Town, South Africa

- At the LEAPS Adoption Agency NGO and the Cape Town SPCA, I've volunteered my services in taking care of the dogs almost every and to promote the adoption of the dogs in the shelters.

EDUCATION

BSc Electrical Engineering (Specialising in Mechatronics)
University of Cape Town

📅 2020   📍 Cape Town, South Africa

Matriculant Pass
Crossmoor Secondary School

📅 2014   📍 Durban, KZN

- Graduated with six (6) distinctions.

ACHIEVEMENTS

- 2018:
  - Chairperson of the UCT Hindu Student's Society
- 2017:
  - Member of MENSA South Africa
  - Sub-committee member of the UCT Hindu Student's Society
- 2016:
  - Class medal for Physics
- 2014:
  - 3rd Academic position award (Crossmoor Secondary School)
  - Deputy Head Prefect
  - Student Council President
  - Graduated from the MMI Mathematics and Physics programme
- 2013:
  - Student council treasury
  - CADSSA Table tennis (District team)
- 2012:
  - Representative on the student council
  - Graduated with black belt in Shotokan Karate
  - Invited into the MMI Mathematics and Physics programme

LANGUAGES

English   ●●●●●
Afrikaans   ●●●○○
Hindi   ●●○○○

REFEREES

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