Apartment 84, Solihull Heights

54 New Coventry Road

Birmingham

West Midlands

B26 3BB

UNITED KINGDOM

Mobile : 07534065332

E-mail : nae716@hotmail.co.uk

D.O.B :18th September 1988

Citizenship :British

**Natalie Egbunike**



**Personal Profile**

A quick learner with organisational, communication and team working skills looking for a challenging and fitting position in a company which offers opportunities for development and growth.

**Education**

**University of Birmingham** *Sept 2007 – June 2011*

MEng Mechanical Engineering - Obtained 2.1

**University modules**

- Applied Mechanics 1,2,3 - Engineering Mathematics

- Advanced Mechanics IV - Bio fuels and Renewable Sources

- Design and Professional Skills1,2, 3 - Real flows with drag and lift

- Combustion, Engines and Emissions - Computational Geometry

- R&D and Manufacturing Processes - Vehicle and Powertrain Engineering

Previous group projects include:

- Designing a power take-off gear reduction unit to be fitted into a diesel engine.

- For Design and Professional Skills we covered all aspects of a real design process by producing a design that was prototyped.

Final Year Project

Using Computational Fluid Dynamics software package ANSYS Fluent v6.3/ Solidworks for 3D modeling of a HCCI engine.

Aim: To analyse the effects of manifold pressure and cylinder wall temperature on a combustion process

**Rosebery School, Epsom, Surrey** *Sept 2000- July 2007*

GCSE’s:

Business, History and Science - (A)

Music, Maths, English, French, ICT - (B)

A Level’s:

Maths (A), Physics, Business (B)

**Engineering Work Experience**

**The Szewalski Institute of Fluid Flow Machinery - (Gdansk, Poland)**

*Research Assistant – June 2010 - August 2010*.

- Comprehensive understanding of Thermochromic Liquid Crystals as a calibration tool, their use and application.

- Assisting a group of research students in the experiment of liquid crystals on film cooled surfaces.

- Worked independently to conducting a small experiment to show colour response of liquid crystals with different heated metallic materials.

- Problem solving skills implemented for equations derived in report.

- Acquired diverse communication skills due to working closely with research students.

**Work experience**

**Alstom Grid – (Stafford, Staffordshire)**

*Mechanical Design Engineer – April 2012 – September 2014*

Engaged in the design and manufacture of Power Transformers.

My role included:

- General mechanical design theory of power transformers:

- Structural design and stress analysis.

- Tank and fabrication design.

- Design for manufacture.

- Lifting, Site installation and movements of power transformers.

- Transport. Materials. Seismic and Vibration Calculations.

- Working on different types of power transformers: HVDC transformers, quadrature boosters, series and shunt reactors.

- Use of design programs: Inventor, AutoCAD, Beam Programs

**Yazaki Europe Ltd - (Coventry, West Midlands)**

*EDS Design Engineer - October 2014 - Present*

Design of wiring harnesses and components for OE automotive manufacturer Yazaki.

- Involved in the design and development of new products from conceptual components and harness designs, to the manufacturing and completion stage.

- Use of software packages Catia V5 and TCe for 3D CAD designs on wiring harnesses and engine components for Jaguar Land Rover.

- Visual Design Verification Processes of wiring harnesses at JLR manufacturing plants.

***Training Courses:***

Intermediate and Advanced Excel Training course

Harness manufacturing processes training in Yazaki Portugal and Yazaki Morocco.

Time and Self Management

DFMEA Training

Jaguar Land Rover - Catia V5 and TCe Training course

**Addition Skills**

Use of Word, Powerpoint, Solidworks, ANSYS Fluent

Studied Level 2 in Spanish (speaking, listening and reading)

Strong analytical skills

Design Experience

Ability to work in team and independently

**Interest’s and Achievements**

Music - At school I was very involved in music and performing at our local theatre, Epsom Playhouse. I have completed grade 1,2,3 and 5 in Piano with the Associated Board of the Royal School of Music. I have also recently started learning how to play the drum kit. I also attend a lot of music gigs and music festivals

Languages – Spent a month in August 2009 at the Don Quijote School in Valencia, Spain studying an Intensive level 1 course in Spainsh.

Sports - Currently play Roller Derby for Hellfire Harlots in Nottingham.

**References:**

Dr R Cripps (University Tutor, Mechanical Engineering Department)

The University of Birmingham

Edgbaston

Birmingham

B15 2TT

Tel: +44 (0)121 414 3344

r.cripps@bham.ac.uk