

Ian Mbote

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PERSONAL STATEMENT

A goal-driven, diligent problem-solver who uses meticulous planning techniques to successfully complete tasks brought forth. As a Master of Automotive Engineering and Master of Design with three years' experience in vehicle systems design for an emergent automotive company, two years' experience in design strategy consulting for OEM's, now heads a strategy and innovation consultancy. Possesses ability to lead a team in a systematic manner so as to meet tight deadlines and strict budgets. Great communicator, capable of soundly converting project pressure to end product quality.

KEY ACHIEVEMENTS

- Selected out of 15000 applicants as one of 35 Africans to spearhead entrepreneurial ventures within the continent. The key criteria for selection was strong business acumen and mental agility to assess and identify monetisation opportunities within a diverse range of industry sectors — which would potentially receive venture capital injection.
 - Winner in the Jaguar Land Rover “Motive-ate” Innovation Competition facilitated by Cranfield University's Centre for Competitive Creative Design (C4D). The winning concept proposed a solution to market-based challenges using design thinking ethos.
 - Led a prototype design and build project whose successful completion was achieved 17 days in advance of a three-month allocated time and USD 4 300 below an intended USD 10 000 expenditure.
 - Introduced Six Sigma practice to a production line via design of production tools and addition of quality gate processes. The result was a product rework reduction of 30% in the first month of implementation, a figure that increased to 80% within three months.
 - Created a vehicle transmission feedback system that relayed gear numbers to the driver of a race car with each shift, resulting in quicker lap times and fewer driver errors. This in-house developed system saved the race team GBP 1 250.
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EDUCATION

September 2016
– October 2017

Master of Design (MDes) Design, Strategy and Leadership.
Cranfield University, United Kingdom. Award: Distinction

Modules: Personal Leadership & Development, Consumer Trends For Design Strategy and Leadership, Design and Brand Management, Creative Enterprise and Entrepreneurship, Managing Innovation and New Product Development, Whole System Design, Strategic Management and Leadership, Programme and Project Management.

Theses: Group Thesis: “Jaguar Land Rover Autonomous Vehicle Brand Equity Framework Development.” (Project Manager)

Individual Thesis: “Driving In Circles: Data Capture For Circular Mobility Within Cities.”

July 2013 – August 2013 Certificate in Engineering for Sustainability. Munich University of Applied Sciences, Munich, Germany – Overall Grade: A

September 2010 – July 2014 Master Of Engineering (MEng) Automotive Engineering. University Of Leeds, United Kingdom – Award: 2:1 (Hons)

Graduate Modules: Mechatronics And Robotics Applications, Automotive Chassis Engineering, Automotive Driveline Engineering, Combustion In Engines.

Undergraduate Modules: Computers In Engineering Analysis, Solid Mechanics, Engineering Materials, Design And Manufacture, Thermofluids, Economics And Management, Vibration And Control, Mechatronics And Measurement Systems, Professional Skills, Finite Methods Of Analysis, Vehicle Design And Analysis.

Theses: “Formula Student Data Acquisition: Brakes and Transmission”,
“Formula Student: The Design Of An Active Brake Bias System”.

CAREER HISTORY

Antler, Nairobi, Kenya
Entrepreneur, August 2019 – Present

Antler is a start-up generator aimed at bringing together the most brilliant talent within a region with the sole purpose of creating businesses which impact and disrupt existing industry norms. The first African program commenced in August 2019 — and has merged individuals from more than nine different African nations.

DeRacci Group, Nairobi, Kenya
Director, January 2019 – Present

DeRacci Group is a consultancy aimed at acting as a one-stop solution to clients’ business challenges — ranging from process and strategy review and/or formulation, service and product design to masterclass provision and workshop facilitation.

- o Facilitated innovation workshops for governmental and non-governmental institutions, The Royal Danish Embassy being a key client, resulting in the creation of new long-term strategic and development plans by their respective boards of directors.
- o Advocated for reform in Kenya’s automotive policy as a member of the Road Vehicles Technical Committee, so as to incorporate electrified mobility. The result was a new set of standards released by the Kenya Bureau of Standards surrounding electric vehicles.
- o Conducted research activities and industry analyses for clients such as Numerical Machining Complex, National Social Security Fund. The findings from research fed directly

into the board of directors' decision-making process, regarding the future sustainability of their respective institutions and sectors as a whole.

- o Responsible for client sourcing, marketing and overall administration of the business. Within the first two months of operation, the company was able to deliver on eight client projects, each worth an average of 4,000 USD — for which positive commendation was received.

Car Design Research, Cambridge, United Kingdom
Product Strategist, May 2017 – January 2019

Car Design Research Limited is an automotive design consultancy whose main purpose is to guide its clients (majority of all global Original Equipment Manufacturers) towards more commercially successful designs.

- o Facilitated workshops in which senior members of OEM design teams would collaborate with experienced specialists from diverse industry sectors, with the aim of realising future products which better engaged with the market through multiple avenues. The result of the workshops were market-leading concept cars, exhibited at auto shows — and on which production iterations were based.
- o Conducted qualitative and quantitative research which fed into the larger business and design strategies of major car brands. A significant example is the Volvo 360c concept, which tackles long-distance trips by offering an alternative to (costly) air travel.
- o Carried out business acquisition, proposal preparation and marketing tasks for the company, netting total new revenues of over 48 000 GBP within a 7-month period.
- o Was responsible for the creation of strategy reports and insights used by the senior management teams of client companies in crucial decision-making. A significant macro example is the wide adoption of digital interfaces throughout new car models, and the mobile-car connectivity suite of mobility services rolled out by several notable marques.
- o Created industry-wide reports covering general design, Human-Machine Interfaces, Colour, Material & Finish (CMF), Consumer Technology and Socio-cultural trends. These reports retailed at prices of between 3 000 GBP and 4 500 GBP each, and were purchased by 11 company boards.
- o Managed day-to-day operations of the company, including project management of active client work, invoicing, project planning, website design and content management, associate recruitment, regulatory compliance and client relationship management. This saved the company overhead costs of above 4 000 GBP per month.
- o Led and managed all media-related company activity — video editing, article edits, photography and graphic design.

Mobius Motors Kenya Limited, Nairobi, Kenya
Body and Interiors Engineer, August 2014 – September 2016

Mobius Motors Kenya Limited is a Kenyan start-up company aimed at designing and building affordable multipurpose vehicles capable of handling tough African terrain.

- o Carried out an ergonomic review of the Mobius II vehicle using the SAE H-Point machine, CAE simulation and design of interior mock-ups for the driver occupant. Results from these methods were then chronicled in an engineering report, a synopsis of which was presented to the Technical Director and CEO. Following sign-off, the ergonomics of the interior were optimised with a 100% positive feedback from previously unsatisfied customers.
- o Put in place new and redesigned current production tools at the body shop and final assembly stages of the production line. New drawings and standard operating procedures were then documented and published for use on the line. Takt times were lessened from hours to minutes, saving the company USD 250 for every hour previously wasted.
- o Solely designed and liaised with a team suppliers to achieve a successful full-scale ergonomic buck for validation. Produced the bill of materials, drawings and build instructions including a project Gantt chart for presentation to the Technical Director. The finished prototype was 17 days early and consumed only 57% of the allocated budget.
- o Led the production team in polishing of line processes using Six Sigma principles. This involved the chairing of meetings to assess current flaws and investigate opportunities to streamline weak points. The vehicle reworks reduced by 30% in one month and eventually 80% in four months.
- o Chaired Body and Interiors video conferences in which 8 participants from Kenya, India and Italy were involved. Meeting minutes, project plan updates and milestone follow-up were catalogued and forwarded to the Technical Director for review. These meetings improved communication and project progress awareness, decreasing task deadlines from weeks to days.
- o Inducted new engineers within the Body and Interiors department through mentoring and shadowing techniques. This shortened assimilation time from one month to two weeks.

University of Leeds Formula Student Racing Team, Leeds, United Kingdom
Systems and DAQ Engineer, October 2013 – July 2014

The University of Leeds Formula Student Racing Team is a project funded by the Faculty of Mechanical Engineering in which 16 students build a race car to compete in the IMechE Formula Student competition.

- Designed and built a gear shift feedback system for the race car in order to decrease driver error whilst operating the vehicle. The difference in cost of designing the system in-house as opposed to an off-the-shelf purchase was GBP 1 250.
- Optimised the race car brake bias adjustment system such that real-time feedback of brake ratio was relayed to the driver display unit during vehicle operation. This resulted in more accurate adjustments and subsequently better overall vehicle competitive performance.

Mobius Motors Kenya Limited, Nairobi, Kenya
Engineering Intern, August 2013 – October 2013

Mobius Motors Kenya Limited is a Kenyan start-up company aimed at designing and building affordable multipurpose vehicles capable of handling tough African terrain.

- Refined the vehicle frame manufacturing jigs resulting in a lead time reduction of 2 hours per vehicle.
 - Revised the existing brake line designs of the vehicle so as to facilitate component service and replacement. The new designs required 35 minutes less to service/replace.
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SKILLS, INTERESTS AND EXTRACURRICULAR ACTIVITIES

Languages – English Native, French Basic, German Basic, Swahili Native.

Software – CATIA V5, DELMIA, MS Office, Solidworks, Matlab/Simulink, LabView, Abaqus, Witness, MS Access, Visual Basic, Arduino Basic Proficiency.

Memberships – Associate Member of the Institution Of Mechanical Engineers, Associate Member of the Chartered Society of Designers, Member of the Association for Project Management

- Played as a tight-head prop for Cranfield RFC, winner of its division league in 2017.
- Played as a number eight for Shelford County Rugby Club, winner of its division league in 2018.
- Played as a tight-head prop for the Mechanical Engineering First XV rugby team that finished 3rd in the 2014 University of Leeds inter-department league.
- Passion for motorsport, particularly rally and Formula One.
- Worked as a voluntary mechanic between May 2012 and September 2012 at the official Nairobi BMW Bavaria Auto Centre. This was a means of learning more about vehicle components.
- Passion for English literature.