

## RAGHAV NAIDU | AMIMechE

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### EDUCATION AND QUALIFICATIONS

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#### **MSc Mechatronics, University of Bath, UK - Merit** **2019 – 2020**

- **Modules (Achieved - 70%)** – Engineering Systems Simulation; Control Engineering; Computational Intelligence; Robotics Engineering; Control of Modern Electrical Power Systems; Electronic Communication Systems; Engineering Project Management.

#### **BEng (Hons) Mechanical Engineering, University of Bradford, UK - 1<sup>st</sup> Class Honours** **2016 – 2019**

- **Relevant Modules** – Six Sigma for Business Excellence; Advanced Fluid Mechanics; Material Failure Analysis; Advanced Engineering Design; Sensors; Further Mathematics and Statistics; Control Engineering; Engineering Statics and Dynamics.

#### **International School of Seychelles Sixth Form, Mahé, Seychelles** **2015 – 2016**

- GCE A Levels: Physics, Applied ICT and Edexcel Mathematics.

#### **The Winchester School, Jebel Ali, Dubai, UAE** **2013 – 2015**

- GCE AS Levels: Applied ICT, Edexcel Mathematics, Physics, and Chemistry.
- IGCSEs: 7 subjects including First Lang. English (A\*) and Maths (A\*).

### EXPERIENCE AND PROJECTS

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#### **Dissertation: Wave Energy Converter: Power increase through control** **2019 – 2020**

- Modelled a six degree-of-freedom wave energy converter in Simulink.
- Designed and implemented a complex-conjugate approximating PD controller, alongside an Extended Kalman Filter, to maximise power generation, yielding power gains of upto 21%.

#### **Individual Project: PID and Fuzzy controller design for cruise control systems** **2018 – 2019**

- Designed and implemented a PID and Fuzzy controller for cruise control system.
- Performed simulation of the developed vehicle model using MATLAB and Simulink.

#### **Year 3: Prosthetic Arm for Indoor Bouldering** **2018 – 2019**

- Led a team of 4, winning the mock investment against ten other teams.
- Delegated the WBS project phases to members based on individual strength, ensuring timely project completion with weekly meetings.
- Documented the technical specifications of the arm, with function, materials, and cost.
- Prototyped a 3D printed physical model based on a virtual mock-up, designed using SolidWorks.
- Performed FEA to identify the material with the optimal strength to cost ratio.

#### **Student Work Experience, Public Utilities Corporation, Mahé, Seychelles** **Aug 2017**

- Collaborated with engineers in the quinquennial major inspection and maintenance of a Wärtsilä power generation combustion engine, used to produce the islands' electricity.
- Assembled and re-calibrated components of the generator before replacing them.

**ACHIEVEMENTS:** BEng Final Year Project Prize | Best academic performance in Year 2.

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### SKILLS AND INTERESTS

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**Skills:** SolidWorks | MATLAB | ANSYS | FEA | MSC ADAMS | Python | GD&T | Fabrication | 3D Printing

**Interests:** Cooking | Baking | Fitness | Badminton | Swimming | Travelling | Hiking | Movies | Novels