

# Reuben Oommen Jacob

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## PROFESSIONAL SUMMARY

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Undergraduate in Electronics and Instrumentation Engineering from Ramaiah Institute of Technology, Bangalore, 2020 batch. Project, Internship, and co-curricular activity experience consist of core and interdisciplinary work in avionics, control systems, embedded systems, computer simulations and micro-controllers. Research interests include autonomous flight systems and multidisciplinary applications of control systems and electronics.

## EDUCATION

- **Ramaiah Institute of Technology**  
*Bachelor of Engineering in Electronics and Instrumentation; Current CGPA: 8.1/10*  
Bangalore, India  
August 2020
- **Delhi Public School East**  
*All India Senior School Certificate Examination; Overall Percentage: 87.4*  
Bangalore, India  
March 2016
- **Delhi Public School East**  
*All India Secondary School Examination; CGPA: 9.8/10*  
Bangalore, India  
March 2014

## Work EXPERIENCE

- **L2i Technologies**  
*Student Intern*  
*Worked on the development of various control system and IOT projects.*  
Bangalore, India  
January-March 2020
- **National Institute of Mental Health and Neurosciences**  
*Student Intern*  
*Performed Asset Management, Risk Management and Calibration of various Bio medical equipment*  
Bangalore, India  
July-August 2019
- **Edhitha Unmanned Aerial Systems**  
*Mechanical Research Member and Navigational Head*  
*Performed various forms of mechanical testing and worked with multiple avionics systems and flight control Softwares to develop autonomous flight systems capable of autonomous navigation, remote sensing, surveillance, take-off, and landing. Took part in the 2018 AUVSI SUAS competition*  
Bangalore, India  
Sep 2017-July2018

## TRAINING

- **Python Programming Masterclass**  
*Udemy*  
Certificate Course  
April 2020
- **Discrete Mathematics**  
*Udemy*  
Certificate Course  
April 2020
- **Testing, Verification and Calibration of Ventilators**  
*Fluke Biomedical Systems*  
Certificate Course  
July 2019
- **Pravega 20 AI and ML workshop**  
*Wisdomware Technologies, IISC*  
Attendee  
January 2020
- **Machine Learning**  
*Internship Studio*  
Certificate Course  
October 2020

## PROJECTS

- **Self-Balancing Cycle with Location Tracking**  
*An autonomous self-balancing cycle capable of static balancing using inertial measurements and a flywheel controlled by a micro-controller. System also provides location tracking using GPS and GSM for extended safety facilities.*
- **GPS location tracker with SOS capabilities**  
*Portable handheld location tracking device capable of continuous tracking with an online database using IOT with various*

*modes of usage.*

- **Unmanned Autonomous Aerial system for simulated reconnaissance missions**

*UAS capable of autonomous flight and navigation, remote sensing via onboard payload sensors, take-off landing and surveillance.*

- **Automatic Home Gardening System**

*An Automatic home gardening system capable of controlled irrigation with specific timing and water volume options.*

#### TECHNICAL SKILLS

- **Areas of Experience:** Avionics, Control Systems Computer Simulations, System Design, MS Office
- **Programming Languages:** C, C++, Python
- **Technologies:** NumPy, Scikit-Learn, Mission Planner, Matplotlib, Verilog, Arduino, Energia, Matlab, Rockwell Automation Software, PSpice, MultiSim.

#### AWARDS

- **Best Project Award**  
*Won 2<sup>nd</sup> place in the best project award held by the Ramaiah Alumni Association.* April 2020
- **India Innovation Challenges design contest Quarter finals Qualifier**  
*Qualified for the quarterfinals of the [Texas Instruments IICDC competition](#) .* 2019
- **International Rank 10 in the AUVSI SUAS Competition**  
*Placed 10<sup>th</sup> Internationally in the [16<sup>th</sup> AUVSI Student SUAS competition](#), a platform where almost 200 international teams annually build, demonstrate, and compete with UAS systems capable of various Mission requirements.* June 2018
- **International Rank 99 in the International English Olympiad**  
*Achieved a rank of 99 internationally and rank 23 in Karnataka for the International English Olympiad held in January 2013.* January 2013
- **State Rank 7 in the International Talent Search Exam**  
*Achieved a 7<sup>th</sup> rank in Karnataka for the International Talent Search Exam.* January 2007

#### EXTRACURRICULAR ACTIVITIES AND ACHIEVEMENTS

- **Keyboard**  
*Play the electric keyboard, certificate holder in Level 1 and 2, Trinity College London, appeared from the Jubal's Music Academy, Bangalore.*
- **Sports**  
*Was in the school badminton team.  
Discus throw champion at intra school level  
Avid fitness enthusiast.*
- **Quizzing**  
*Rank holder in various quizzing olympiads.*
- **Leadership**  
*Navigational head for the AUVSI SUAS, team leader for the IICDC competition team.*