Ashwin Kumar K

ashwinschronicles.github.io

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EDUCATION

BITS-PILANI GOA CAMPUS
Int. MSc Physics - BE Electronics and Instrumentation
GPA - 7.1/10.0
July 2020 | Goa, India

VVS GJ PU COLLEGE, MYSORE
Class 12TH KSEB Board
Physics - 100 %, Chemistry - 96 %
Mathematics - 99. %
2017 | Mysore, India

DEMONSTRATION SCHOOL
CBSE Board
Class 10th - 9.8 CGPA
2015 | Mysore, India

COMPETITIVE EXAMINATIONS
Rank in: KVPY-55,ComedK-113, KCET-592 JEE Main-13900 JEE ADV.-24000 .

LINKS

Facebook:// **iamashwin99**
Github:// **iamashwin99**
         iamashwin26
LinkedIn:// **iamashwin99**

RELEVANT COURSEWORK

PHYSICS
• Electromagnetic theory I&II • Classical Mechanics • Quantum Mechanics I • Non-Linear Dynamics • • •

ELECTRONICS

SKILLS

COMPUTATIONAL
• Shell • Python
• Matlab • LaTeX
•C • C++ • Photoshop

EXPERIENCE AND PROJECTS

- Design of a cryogenic probe for transport measurements.
- Measurement of low temperature Seebeck coefficient of different metals as a function of temperature under the guidance of a PhD scholar.
- Identification of superconducting transition of Yttrium barium copper oxide under the guidance of a PhD scholar.
- Determination of temperature of stars by analysing images obtained from a simple camera.
- **A Novel Stove Stand:** Designed and built an LPG Gas stove stand which harnessed the otherwise wasted heat energy during cooking into electricity (about 20W). It also reduced the cooking time.
- **Pressure sensitive mat:** To make a mat that can sense touch enabling the determination of different poses such as Running, Jumping, Rightward-leftward movement,one leg hop etc.(*Worked in electronics and algorithm design*)
- For more completed projects visit my web page, **ashwinschronicles.github.io**

Projects currently pursuing:

- Hyperloop India
  Design and build a Hyperloop pod to participate in SpaceX's Hyperloop competition. (*electronics team member*)
- **Team Imitato**
  Designing an exosuit to control a humanoid that can be beneficial in reaching inaccessible and non-human conditions.(*Working as Electronics and Communication head along with Haptics Control*)
- **Project Kratos**
  Design and build a rover to participate in University and European Rover Challenge. (*Working in the Interfacing sub division of Electronics team.*)

AWARDS AND ACHIEVEMENTS

2019	National top 1 % in NGPE-19 exam (out of 11372 candidates)
2019	3rd place in Open CBR Hackathon organised by University of Leeds at BITS Pilani Goa campus.
2018	Presented a paper entitled \textbf{"Algorithms in ancient Indian Mathematics and Astronomy"} at "National Conference on Ancient Indian Knowledge: Science and Technology", NCERT, New Delhi.
2018	Awarded KVPY 2017 Fellowship
2018	Offered INSPIRE 2017 Scholarship
2016	Awarded ISCA Travel award by Infosys Foundation
2016	Participated in 103rd Indian Science Congress held at Mysore
2016	Participated in IRIS science fair organised by Intel at Delhi
2016	Participated in Google science fair
2015	Participated in Rashtriya Kishore Vaigyanik Sammelan of 102nd Indian Science Congress held at Mumbai
2014	Participated in 41st Jawaharlal Nehru National Science Exhibition at Chandigarh (Presenting the device stated as " A Novel Stove Stand")

ARTICLES AND PUBLICATIONS

[1] A. K. K. Review articles on scientific and hobbyist instruments on element14.com.

[2] A. K. K. "Gravitational waves really exist!". *Dream 2047 (Vigyanprasar)*, 18(7):28–29, Apr. 2016.