

PRATEEK GOYAL

Paschim Vihar, Delhi-110063, India
(+91)9013591305 ◊ prateekg045@gmail.com

 github.com/PrateekGoyal18  linkedin.com/in/prateekgoyal18  canvasoflearning.wordpress.com

EDUCATION

Guru Gobind Singh Indraprastha University, Delhi Bachelor of Technology, Major: Electronics & Communication Engineering	2014 - 2018 Aggregate: 76%
Doon Public School, Delhi Senior School	2014 Aggregate: 88.2%
Doon Public School, Delhi Secondary School	2012 CGPA: 9.4/10

WORK EXPERIENCE

Current SEPT 2018	Research Associate <i>Indian Institute of Technology, Delhi</i> <ul style="list-style-type: none">Working on project titled “Energy Efficient Buildings: Technology with Intelligence”.Involved in the development and deployment of Adaptive Lighting Algorithm (research paper drafted) and IoT Analytics-based Smart Energy Meter (patent drafted).Designed and installed smart appliance control modules with features as appliance health monitoring, automatic control and time-table based scheduling. (Advisors - Dr. B K Panigrahi & Dr. Ashu Verma)
JUN-AUG 2016	Electronics Intern <i>Banaao Innovation Labs, Gurugram, Delhi-NCR</i> <ul style="list-style-type: none">Worked on various IoT and Home Automation products, some of which included Automated Door Mat, RFID operated coffee machine, Propeller Clock, Amazon Dash Button and Happy HR board.Headed training sessions to teach students and hobbyists microcontrollers programming, PCB designing & 3-D Printing. (Mentor - Mr. Prem Sagar, CEO)

TECHNICAL SKILLS

Languages	C/C++, Embedded C, VHDL, Basics of Verilog and Python, SQL
Softwares & Tools	Arduino IDE, MATLAB, Simulink, NI LabView, Labcenter Proteus, Eagle CAD, Android Studio, MIT App Inventor, \LaTeX , Xilinx ISE, Cadence OrCAD Suite & Virtuoso, Atmel Studio, Eclipse IDE, Git, Processing IDE, PLC Tools, DIALux, OpenCV, OPAL-RT

INDUSTRIAL TRAININGS

Summer Trainee - Western Central Railways	June 2016 - July 2016
Summer Trainee - Airports Authority of India	June 2017 - July 2017
Quality Assurance Trainee - Indian Navy	June 2017 - July 2017

ACADEMIC PROJECTS

- SAMUDRA - System for Autonomous Underwater Detection and Research Activities**
 - Our team designed an AUV i.e, an Autonomous Underwater Vehicle with capabilities such as sea floor mapping, surveillance activities, sea research work etc.
 - For further references see [Website](#) and [Project Files](#).

2. Coin Detection based Mobile Charging System (Minor Project)

- Implemented a system which takes in a coin, detects it's value by image processing algorithms on MATLAB and sends that value to the microcontroller which then charges the mobile for a set of duration of time, based on the value of the coin. ([Project Description & Files](#))

3. Personal Weather Monitoring System (Major Project)

- Developed a system that can display the atmospheric and environmental parameters like temperature, humidity, pressure, CO_2 level etc of a particular place and upload these values to a cloud database for global access. ([Project Description & Files](#))

OTHER PROJECTS

Horosapiens, Cpp, Signal Generator, DTMF Controlled Robot, PID-based LFR, GSM-based Soil Moisture Monitoring and Alert System, Temperature Control & Indication System, Patient Health Check Monitoring System, Electronic Yarn Control System, Underwater Rover

PEER-REVIEWED ARTICLES

1. Prateek Goyal and PS Sharma, "Coin Detection based Mobile Charging System", *Proceedings of the 13th INDIACom-2019: 6th International Conference on Computing for Sustainable Global Development*. [[Link](#)]
2. Gaurav Prit, Prateek Goyal and Dr. Tarikul Islam, "A novel design of the Parallel Plate Capacitive Sensor for Displacement Measurement", *2019 Annual IEEE India Conference (INDICON)*. [[Link](#)]
3. Prateek Goyal, Gaurav Prit and Dr. Manisha Bharti, "Smart Indoor Weather Monitoring Framework using IoT Devices and Cloud Computing", *ICSC 2020: 6th International Conference on Signal Processing & Communication*.

ACADEMIC ACHIEVEMENTS

1. 2nd Runner-up in Line Following Robot competition out of 20 teams at Delhi Technological University for designing a "PID based LFR".
2. Spearheaded the showcase of Banaao Lab's projects at Delhi Mini Maker Faire' (DMMF) held in August 2016, involving more than 50 exhibitors and thousands of visitors.
3. Our team project - SAMUDRA was praised by the Dy. CM, Delhi - Mr. Manish Sisodia and the then Lt. Gov, Delhi - Najeeb Jung at India International Trade Fair 2016 (IITF'16) and covered by Hindustan Times.
4. Participated in national level E-Yantra Robotics Competition hosted by IIT-Bombay and successfully completed stages 1 & 2 for image processing tasks.
5. Worked as an Educator at "Unacademy - India's largest learning platform" for 3 months, teaching students concepts of Quantitative & Logical Reasoning.
6. Attended five 1-day invite-only workshops organized by Internshala.
7. Participated in Embedded System Design competition held by Texas Instruments in our university.

POSITIONS OF RESPONSIBILITY

- | | |
|---|----------------------|
| 1. Training & Placement Cell
<i>Student Placement Coordinator</i> | Aug 2015 - July 2018 |
| 2. ATLAB (Robotics Club of AIACT&R)
<i>Core Technical Member</i> | Feb 2015 - Feb 2017 |
| 3. URVAR (Eco Club of AIACT&R)
<i>Coordinating Member</i> | Jan 2016 - May 2017 |

INTERESTS AND ACTIVITIES

- Technology, Open-Source, Programming
- Travelling
- Enjoy all sports particularly cricket, football and table tennis
- Creating content for YouTube