Aman Kumar Dewangan

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Educational Background

✧ **Bachelor of Technology in Electrical Engineering, National Institute of Technology Raipur (2018-2022)** – 8.51 CPI (Honours)
✧ **Diploma in Computer Applications, CV Raman University (2019-2020)** – 83.85%
✧ Higher Education **12th CBSE Board**, Krishna Public School **(89.6%)**
✧ **10th CBSE Board (9.2 CGPA)**

Technical Skills

Programming Languages - C++ || Arduino || MySQL || Python (Raspberry Pi, IoT) || C || PHP || Wolfram (Mathematica)

Technical Knowledge – **DSA ||** Micro Electronic Mechanical Sensor **|| Arduino || IoT || ESP8266 Micro-controllers || Raspberry Pi ||** Circuit Designing **|| DBMS ||** PCB Designing **|| Frontend** – **HTML/CSS/JS || Bootstrap || OS || OOPS**

Tools - Git || GitHub || Firebase || SmartThings || Udibots || Remix || vscode || Heroku || Arduino IoT || ThingSpeak || Photoshop || Illustrator || Figma || Aftereffect

Experience

- **Edison Engineer at GE Healthcare** (August 2022 - Present)
- **Research Student Intern at Wolfram Summer School 2021** (July 2021 – Aug 2021)
- **Summer Research Intern at National Institute of Technology Andhra Pradesh** (May 2020-July 2020)
- **Embedded IoT Intern at SVA Robotics** (September 2020 – October 2020)
  (Letter of Recommendation: https://bit.ly/3dbOTkO)

Projects

- **LogiTraffic (July 2020 - August 2020):**
  - **LogiTraffic is an IoT based Deep Learning Powered Traffic Management and Theft Detection Solution.**
  - It's an online website platform using which user can keep check on certain real-time parameters associated with the vehicle which includes fuel-level, GPS location, Brake System Temperature, Speed, Traffic Forecasting using Vehicle Detection and obtaining vehicle count through different road nodes and predicting Traffic Congestion/Jams.
  - In case the user suspects his/her car has been stolen by logging in using the credentials one can lock the vehicles and see driver's real time video stream and a picture of the driver is downloaded on the system so that it can be used for further investigation and police cases.
  - **(YouTube Video Presentation by Team Aztecs: https://youtu.be/rP2OGjZJ5NY)** – **Presented in E-Ujjwala Hackathon 2020 by Birsa Institute of Technology, Jharkhand (Team Aztecs - Finalists)**
  - **(GitHub Repo: https://github.com/amandewatnitrr/Aztecs-LogiTraffic)**

- **MedIoT/Sanjeevani (May 2020 – July 2020):**
  - **Sanjeevani - An Android-IoT based Real-Time Health Monitoring and Medical Consultation System**
  - During my **Internship at National Institute of Technology Andhra Pradesh**, idea is of a Web platform that allows remote monitoring of patients through a hardware setup that uses a set of sensors to collect patient's data and produces a pdf report out of it and emails it to the doctor. The login mechanism is quite unique, first we have a patient login, within this each time the person who performs the test or monitoring needs to login with his/her unique ID to have a proper knowledge about when and who performed the test. In addition to this we have a textual interface in parallel to allow both tester (to write down and send some extra information in addition to report) and doctor as well who can write down prescription on the other end.
  - Developed at **Apscript Hackathon organized by IEEE APSIT**.
  - **(Documentation: https://bit.ly/3jMmoeD)**
  - **(GitHub Repo: https://github.com/amandewatnitrr/A-10-NEXA and https://github.com/amandewatnitrr/evolution-hacknitr)**
  - **(Certificate of Appreciation: https://bit.ly/3jLGZjf)**

- **Water Quality Index IoT and AI Solution (Feb 2020-March 2020):**
  The Project aims at tracking down Water Quality Index flowing through the stream by measuring pH, NO_2 Concentration, Temperature, Turbidity, Dissolved Oxygen, Total Dissolved Solid and calculating Water Quality Index and transmitting data over cloud for remote Data access and predicting further change in Water Quality Index using ARIMA Model. (Arduino | IoT | ML | Web Dev)
  - **(GitHub Repo: https://github.com/amandewatnitrr/Robothon_1.0_NITRR)**

- **Woofy (July 2021):**

  - Ensure Infant Safety and Hygiene: As soon as the cradle pad is detected to be wet or a discharge is detected, the guardians will receive a notification.
  - 24×7 Baby Under Observation: The baby is under continuous observation 24*7 through a camera at the cradle roof and voice detector to notify if the baby cries.
  - Notifies Guardian in case of any event that requires immediate attention: In case the baby tries to climb the cradle or if any force that appears to cause the cradle to fall is experienced. The Guardians are notified immediately.
  - **(GitHub Repo: https://github.com/amandewatnitrr/Woofy/tree/master/WOOFY)**

- **Wolfram Summer School 2021 (June 2021 - July 2021):** The Purpose of the Project is to design a function that tells difference between two given expressions and denotes the changes that need to be made to reference expression(expr_1) to make it appear same as another expression (expr_2) and produce the same evaluation.
  - **Link: https://community.wolfram.com/groups/-/m/t/2312810**

Position of Responsibility

- **Core Member of Technical and Professional Activity Committee IEEE Bombay Section (August 2020 – April 2022)**
- **Founder and Chief Board Member of Hack Club NIT Raipur (November 2021 - Present)**

Skill Specializations

- **An Introduction to Programming the IoT - Specialization (Coursera) - University of California Irvine**
- **Front-end Web Development - Specialization (Coursera) - University of Michigan**
- **30 Days of Google** – **Google Qwiklabs - Cloud Engineering**
- Data Science Math Skills - **Coursera - Duke University**

Achievements

- **Winner** – **Overall 1st Position at Codeutsava 5.0 organized by Turing Club of Programmers NIT Raipur (2022)**
- **Runner Up - 2nd Position at Apscript Hackathon organized by IEEE APSIT (2021)**
- **Runner Up - 2nd Position at Robothon 1.0 organized by Robotix Club NIT Raipur (2020)**
- **IJRET - Research Paper on** "**Application of IoT and Machine Learning in Agriculture**"
- **Mentored at SparkDev Robotics Program 2021 (UPE FIU), HackOdisha 2021, HackNITR 3.0, HackCBS 4.0, ShellHacks 2021 (UPE FIU).**

Link

- **GitHub: https://github.com/amandewatnitrr**
- **LinkedIn: https://www.linkedin.com/in/aman-kumar-dewangan-akd13o1/**
- **Medium: https://medium.com/@amandewatnitrr**
- **Website: https://young-sierra-48561.herokuapp.com/index.php**
- **Wolfram: https://community.wolfram.com/web/amandewatnitrr**