AMRITANSH SINGH

📞 Mobile No.   ✉ Email   in LinkedIn   ○ Github

EDUCATION

- **Indian Institute of Information Technology, Kottayam** — Kerala, India
  Bachelor of Technology - Electronics and Communication Engineering; CGPA: 7.91 — *Dec 2020 - May 2024*
  Courses: Data Structures, Analysis Of Algorithms, Computer Organisation, Networking, Control Systems, Analog ICs, Microprocessors and Microcontrollers, Power Electronics, Electromagnetic Theory, Digital Signal Processing, Verilog HDL, Computer Networks, AI, Digital Communication, IoT, Information Theory and Coding

- **Indian Institute of Technology Madras** — Chennai, India
  B.Sc. in Data Science; GPA: 8.3 — *Jan 2021 - Present*
  Courses: Database Management Systems, Python Data Structures, Java, Business Data Management, Operating Systems, Analysis Of Algorithms

SKILLS SUMMARY

- **Languages:**   Python, C, C++, JavaScript, SQL, JAVA, System Verilog
- **Frameworks:**   AngularJS, ReactJS, NodeJS, ExpressJS
- **Tools:**   GIT, GitHub, PostgreSQL, VS Code
- **Platforms:**   Linux, Web, Windows, Arduino, Raspberry Pi, AWS, Matlab, Keil uVision, LPC 1768

EXPERIENCE

- **Reflections Info Systems** — June 2022 - Sep 2022
  IoT Based ECG Processing using AI — **Remote**
  - IoT Based real-time ECG Monitoring System
  - Trained a Deep Learning Model in Tensorflow to categorize various heart arrhythmias.

- **Krish Tec** — Aug 2021 - Dec 2021
  Angular JS, Development — **Remote**
  - Dash Board development of Automobile
  - Software and MQTT integration for Online On-Board Diagnostics (OOBD)

PROJECTS

- **Braille Based Pulse Oximeter** — Present
  Custom PCB Design, Python
  - Developing a Braille Based Pulse Oximeter for visually impaired.
  - IoT enabled device which uses the principle of reflectance oximetry.

- **Instant Credit Transfer Payment System** — Sept 2022
  NodeJS, MongoDB, RegEx, REST Api, Docker, AWS, Microservices
  - Developed a Modern Banking System using Microservices
  - MT-103 to PACS.008 conversion and validation.

- **Vanali** — Dec 2021 - Feb 2022
  Raspberry Pi, Python
  - IoT based real-time Car Diagnostic System using Raspberry Pi board
  - Software and MQTT integration for Online On-Board Diagnostics(OOBD)

- **CoviPrevento** — Mar 2021
  NodeMCU
  - IoT based IR temperature reader
  - Sends a notification to mobile phone about temperature of an individual in front of the device

ACHIEVEMENTS

- **Reflections Automotive Challenge:**
  - Secured **3rd position** in Reflections Automotive Challenge by BloomBloom 2021-2022
  - Made a prototype **IoT device** for automobile's diagnosis
  - Incubated the prototype developed received an **internship** offer

- **NeST Digitals' Microservices Hackathon:**
  - Secured **3rd position** in NeST Digitals' Microservices Hackathon 2022
  - Developed a Credit Transfer Banking System using Microservices
  - Received an **internship** offer

Honors and Awards

- 30 days of **Google Cloud** - Dec 2021
- **Hacktoberfest** 2021 DigitalOcean - Nov 2021
- **#6307** Global Rank among **50,000+** Hackers, Google Hash Code - Feb 2021
- Won an **Echo Dot 3rd Gen** at **Alexa Skills Challenge** - Oct 2018

Volunteer Experience

- **Mentor at Unlock Hacks**   Remote
  Mentored over 50+ students on Web Development and Arduino, NodeMCU, RaspberryPi   Jan 2022