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Akhilesh Kumar

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Education

2016-2020 (Expected) | B.Tech in **Electronics and Communication Engineering** — **GPA**: 7.0/10.0
Jaypee University of Information Technology, Waknaghat

Technical Skills

Programming	*Proficient:* C++, Python, Javascript
	Competent: Java, Golang, PHP
Libraries / Frameworks	Node.js, ReactJS, Tensorflow, Keras, OpenCV, ROS
Databases	MySQL, MongoDB
Systems / Platforms	Git, AWS, Docker, Azure, Linux

Work Experience

Jul 17 – May 17 | **Machine Learning Intern** — **USHR, India**
- Interpret data on price, yield, stability, future investment-risk trends, economic influences, and other factors affecting investment programs using Data Analytics.
- Worked on Data Scrapping, Fuzzing, Preprocessing on Documents and Setting up a multi-label Classifier.

Academic Projects

- **Implementation of Digital Filter in Real Time using DSP C2000 Launchpad**
  Designed and implement FIR and IIR digital filters in real time on the DSP C2000 LaunchPad using audible signals and tones acquired in 4 different channels and the option to mix these signals individually as part of DSP Course.
- **Microwave circuit optimization for impedance matching.**
  Wrote Object oriented Python Script for Optimized Impedance matching in Microwave RF circuit.
- **Data Communications in Python**
  Wrote multiple python script for explaining freqency-amplitude relationship for various Data Communication types.
- **Response Detection in Verilog**
  Built an end to end system for early signal detection in Verilog.Computed D to Q delay and clock to Q delay for determining response delays. The application is Buzzer type Quiz system devices.

Hackathons & Competitions

Current | **Pedestrian Safety Device** — **Smart India Hackathon '19**
- Built a Pedestrian Detection Pipeline using INRIA dataset and YOLO model with Darknet framework. Comparatively analyzed the efficiency of alert trigger with INRIA and DALIMAR datasets.

Nov 17 | **IoT based Pollution Monitoring and Waste Management for smart cities** — **Smart Cities Hackathon-'18**
- Won 2nd Prize for building a Smart City smart waste management dashboard with various utilities created for municipalities. The dashboard was built with a NodeJS backend and had several utilities including plots, optimal routes, grievance portal and municipal vehicle finder to name a few.

Feb 17 | **Underwater Glider for Real Time Mapping with SensorTag IoT System** — **Murious 2017**
- Accomplished automated glider controlled movement with a ballast system. Developed obstacle-avoiding feature and Interfaced TI CC2650STK SensorTag with Raspberry Pi to retrieve data in real time.

Extracurricular & Leadership

Current | **Maintainer**, MetaJUIT Wiki

Current | **Coordinator**, JYC Media & Publicity Committee
- Leading a group of 45 students in areas of Digital Marketing (SMM, Email-Campaign), Graphic Designing/Video Editing

Current | **Overall Coordinator**, TIEDC | E-Cell of JUIT
- Actively building a vibrant startup ecosystems in Himachal Pradesh. I managed and coordinated with a team of 40 volunteers to organize Techstars Startupweekend Solan.

Dec 2018 | **Team Head**, Robotics & AI Team, ACM JUIT
- Responsible for forming event policies and managing Robotics & AI Projects in ACM Student Chapter of JUIT.