 My Website
 LinkedIn Github

UJJWEL BALWAL

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EXPERIENCE

| Summer Intern | LeanKloud Solutions Pvt Ltd | April 2020 – June 2020 |

- Designed and implemented sanity checks for new Amazon AWS and MS Azure customers
- Automated sanity checks and metric collection using Boto3 and AWS Lambda
- Automated reporting of Lambda results using Jira python API

| Winter Intern | Admatic Solutions | October 2019 – December 2019 |

- Created a gesture recognition ball using GRT and ESP32
- Designed computer vision applications for teaching aids
- Implemented OpenAI-Gym based agent to play air-hockey

EDUCATION

| Chennai, Tamil Nadu, IN | SSN College of Engineering | 2017 – 2021 (Tentative) |

- Persuing B.E. in Computer Science and Engineering
  - 8.3 / 10 CGPA (5 / 8 semesters) - Anna University
  - Member of Competitive Coding Club, Google App Development Club
  - Representative in The Class Committee Group

| Udhampur, Jammu Kashmir, IN | Kendriya Vidyalaya No. 1 | 2005 – 2017 |

- 89.4 / 100% (class 12th) - Central Board of Secondary Education
  - Physics, Chemistry, Mathematics, Computer Science
- 10 / 10 CGPA (class 10th) - Central Board of Secondary Education

TECHNICAL SKILLS

Programming

- Python • C++ • C • Java • HTML • SQL • Assembly • LaTeX•

Hardware

- ESP32 • CC3D • Arduino •

Platforms

- AWS • ESP-IDF • Android • MySQL • OpenPilot • Arduino IDE •

WEEKEND PROJECTS

- **Neural Network Visualizer** - A simple neural network visualizing web application
  - Using Streamlit, Keras and Flask
- **Image Denoising** - Autoencoder based denoising of a given grainy image
- **Image Upscaler** - Image upscaling using autoencoders
- **Synthetic Image Gnenrator** - Generate artificial images similar to training images, using DCGANs

ADDITIONAL COURSES AND CERTIFICATION

- **Deep Learning Specialization:** (ongoing) deeplearning.ai
- **Algorithm Design:** Penn MOOC
- **Machine Learning:** Stanford MOOC
- **Data Science Methodology:** IBM
- **AI on the Edge:** (introductory) Intel
- **Spanish Level A1 equivalent:** InAWord Chennai

POSITION OF RESPONSIBILITY

Organizer	**Invente 2k19**	**SSN Annual Tech Fest**

- Problem setter for Data Structures and Algorithms path of Technical Quiz.

Education Volunteer	**Defence Expo 2k18**	**International Exhibition**

- Single point of contact in American Pavilion.

School Captain	**K.V. No. 1, Udhampur**	**Student Body**

- Elected head of the Student Body.

PUBLICATIONS

- **Fossil Fuel Emission Prediction** - Predicted the future CO2 emission in various countries based on historic trends; using various machine learning techniques on the CDIAC dataset, Oak Ridge National Laboratory
  - Paper presentation in International Conference on Recent Trends in Clean Technologies for Sustainable Environment *(CTSE)*, September 2019
- **Bot Assisted Software Development** - Concept of a system to structure and catalog program code snippets, such that a bot could read that catalog, understand the working and behaviour of a code block, and fetch it when the programmer needs related or same functionality
  - Published in *IJITEE* (Scopus Indexed) view here
  - ISSN: 2278-3075, Volume-8 Issue-6S, April 2019

AWARDS AND ACHIEVEMENTS

- **Rank 8** - Online competition ImageClef 2020 Tuberculosis CT Report: Automated CT-scans report generation (out of 65 research teams)
- **Rank 42** - State level engineering enterance exam JK-CET 2017 (out of 10,000 candidates)
- **Scholarship Recipient** - Full waiver for Bachelors Degree - from All India Council of Technical Education, Govt of India
- **Certificate of Honor:** National Winner of Gurutsav 2014 - from Dept of Human Resource Development, Govt of India
- **Certificate of Appreciation:** Part of team representing Jammu Region in the finals of National Science Congress - from Dept of Science, Govt of India

EXTRA CURRICULAR ACTIVITIES

- **National Service Scheme** - Volunteer
- **National Cadet Corps** - former Cadet with A-Certificate
- **Bharat Scouts and Guides** - former Scout with RajyaPuraskar, served as The Senior Patrol Leader