

# KUNAL SHARMA

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## EDUCATION

**National Institute of Technology Warangal** 2017 to 2021  
B. Tech in Electrical and Electronics Engineering

## SKILLS

**LANGUAGES/Frameworks:** TypeScript, NodeJS, NestJS, JavaScript, Python, C++  
**DATABASES:** PostgreSQL, MySQL, MSSQL  
**QUEUES:** Kafka  
**DATA ENGINEERING:** PySpark, Airflow  
**LOGGING:** OpenSearch, Cloudwatch  
**CLOUD PLATFORMS:** AWS, Azure  
**OTHER INTERESTS:** Astronomy, Graphic Designing

## PUBLICATIONS

**HCH DEX: A Secure Cryptocurrency e-Wallet & Exchange System with Two-way Authentication** Oct. 2020  
IEEE, 2020 Third International Conference on Smart Systems and Inventive Technology (ICSSIT)  
DOI: [10.1109/ICSSIT48917.2020.9214122](https://doi.org/10.1109/ICSSIT48917.2020.9214122)

**Smart Boarding System with e-Passports for Secure and Independent Interoperability** Nov. 2021  
Springer Nature Computer Science, 3, 52 (2022)  
DOI: [10.1007/s42979-021-00938-5](https://doi.org/10.1007/s42979-021-00938-5)

## ACTIVITIES

**Assistive Technology Team, Innovation Garage (IG)**  
Working on technology solutions for **Visually Impaired(VI)**. Current Projects: Teaching geometry to VI kids, Navigation system for VI people.

**Electrical Engineering Association, NIT Warangal**  
Served in **Event Conduction & Coordination** and **Design** teams.

**E-Cell & E-Summit, NIT Warangal**  
Served in **Design** and **Event Conduction & Coordination** teams.

**Technozion, NIT Warangal**  
Managed a techno-marketing event named **MAD MARKETING** at the annual technical fest of NIT Warangal. The event was the only management themed event in the whole fest. It witnessed a participation of **400+ students**.

## EXPERIENCE

**MediBuddy** Apr. 2022 to Current  
*Software Development Engineer I* Bengaluru

- Implemented key **wallet ledger** feature that **increased conversions by 12%**. (Angular)
- Implemented **Kafka queues**, allowing operations to automated & streamline insurance claims process. (Kafka, TypeScript, NodeJS)
- Migrated MSSQL **stored procedures** to **PySpark** on EMR. (PySpark, Airflow, MSSQL)
- Automated doctor payout **MIS reports generation**, that helped finance save time and resources. (NodeJS, MySQL, Google API)
- Unified the end to end **financial transactions flow**, giving visibility to business for an **entire BU** with **xxCr/month** revenue. (TypeScript, NestJS, MySQL, Athena, Redis)
- Single handedly designed & implemented a JSON based **custom request workflow system** for reimbursement claims process to onboard multiple corporate flows. (TypeScript, NestJS, PostgreSQL)
- Designed & Implemented **fraud detection** logic to **flag counterfeit bill invoices** uploaded for reimbursement claims process. (TypeScript, NestJS, PostgreSQL)

**ACT Fibernet** June 2021 to Apr. 2022  
*Management Trainee - Customer Analytics* Bengaluru

**Technical Leadership Development Program (TLDP):**

- Redesigned & Improved **CSAT score** capturing **platform** giving Marketing and Business leaders a visibility on customer satisfaction. (HTML, CSS, JS, PHP)
- Designed and Implemented a custom self hosted **Customer App Analytics tool** to capture metrics like **user journey**, **friction points**, **user engagement**, **average session length** helping them to better understand users. (County, MongoDB, Python, Parse)

**Aufenbach** Oct. 2019 to Mar. 2020  
*Internship* Warangal

**Real-time Body Tracking for VR Applications:**

- Developed a system through which user's physical activities are tracked using sensors.
- Users can **walk** inside computer simulation **without any hand controls**.
- Worked on **design** of system, **data acquisition** from sensors and conversion to useful format.
- Was able to convert the work done here into **2 research papers** that were presented at various locations.

## PROJECTS

**Custom URL Shortener - smolink**

- Shortens URL upto length **512 characters to 6 characters**
- Able to redirect links and keep **stats** on the number of visits
- Users can set their own **personalized URL**
- Has HTTP Basic Authentication to view stats

**Django Blog Website**

- Blog website made using Django and deployed on PythonAnywhere, sqlite3 is db
- Users can:- **Register new account**, **create**, **update**, **delete posts**
- Choose a **custom profile picture**, View posts by individual user
- Change account username, email, password
- Request password reset email

**Celebrity Face Recognition**

- Dataset used **250+ images** in **5 categories** mined using web scraping
- SVC, Random Forest, Logistic Regression, OpenCV, Python, Flask
- End to end project with Web UI where user can **drag and drop** the image to classify
- Successfully achieved an **accuracy of 82%**

**Bengaluru Real Estate Price Prediction**

- Dataset used consists of **13,000 records** with **8 independent features**.
- LinearRegression, DecisionTreeRegressor, Python, Flask
- End to end project with Web UI, user can input the features & get an estimate price
- Successfully achieved an **accuracy of 86%**

## ACHIEVEMENTS

• **Joint Entrance Examination (Advanced)**  
AIR: 7447 (GEN)

• **Joint Entrance Examination (Main)**  
AIR: 6107 (GEN)  
Top 0.5% of 1.3+ million students nationwide

• **Science Olympiad Foundation**  
School Topper

## VOLUNTEERING

• **World Space Week, NIT Warangal (In association with WSWA and ISRO SDSC, SHAR)**  
Event Coordination and Public Relations. The event received a footfall of **15k in 2 days**. **~80%** of them were school children.