

**UTTEJ KURUMA**

Course : **B.E. (Hons.)**, Civil Engineering, 2023
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CGPA : 7.2

**SUMMER INTERNSHIP / WORK EXPERIENCE****Software Development Intern, Larsen and Toubro Infotech****Jul 2022 - Dec 2022**

- Title: Learning And Development in the Metaverse
- Built a VR space for calls, classes, hangouts, and fun
- Used Blender for 3D assets and Unreal Engine 5 to build the virtual world
- Focused on the multiuser aspect of the project

Research Intern, Roads and Buildings Department, Government of Telangana**May 2021 - Jul 2021**

- A case study of local traffic data
- Explored traffic and vehicular load data
- Analyzed this data to assess road quality
- Using current road quality and estimated required quality, identified areas requiring repair and developed repair time estimates

PROJECTS**Estimation of Future Rainfall in Climate Change Scenarios - Machine Learning****Jan 2022 - May 2022**

- Developed accurate estimates for future rainfall patterns in specific districts using macro-historical rainfall records
- Used official government weather records, and established a data engineering pipeline designed to extract relevant markers using netcdf4 and cfrib and bias correct the data using empirical quantile mapping
- Analyze relations between predictors and predictands, especially correlation windows and using this, developed multiple modelling techniques including XGBoost, ARIMA and Linear Regression.
- Developed as part of the course Engineering Hydrology

Application Of AI In Building Information Modelling - AI**Aug 2021 - Dec 2021**

- Conducted a thorough review on the state of the art techniques for various facets for AI in Building Information Modelling.
- Explored the use of predictive models to analyze data from temperature sensors to prevent and respond to hot zone accidents
- Explored the use of fuzzy and multiobjective techniques including genetic algorithms to aid construction planning to optimize manpower, construction materials and workforce scheduling
- Compiled our findings into a research article for the course Application of AI in Civil Engineering

Subjects / Electives

OPER Research for Engineering, construction planning and technology, Application of AI in Civil Engineering

Technical Proficiency

C Programming, C++, Python, HTML + CSS, JavaScript, OpenCV, Tensorflow, Blender, StAADPRO, AutoCAD, Unreal Engine, Unreal Engine 4, Game Design and Development, Revit Architecture, 3DSMAX, Photoshop, Illustrator, After Effects, Premiere Pro, Houdini, DaVinci Resolve, Twinmotion

EXTRA CURRICULAR ACTIVITIES**Learning New Skills**

I have a hobby to learn any new Skills that shows up in the world. Helps me feel confident and up to date with the world

3D modelling

I use Blender to make 3D artworks whenever I find time, or get stuck with something. I also am learning Houdini, which is known to be the hardest 3D modelling tool because of its procedural nature

Photomontages

I use Photoshop to create Photo manipulations, montages and composites when necessary, or as a hobby

LANGUAGES KNOWN

English, Telugu, hindi, kannada