Pankaj Parmar

Aspect 3, Sheffield, UK (Open to relocate) · LinkedIn · pankajparmar10110@gmail.com · 07470-094-679

WORK EXPERIENCE

Geospatial Analyst - Part time
Automatic Knowledge Ltd.

Jan. 2023 - Nov. 2023
Sheffield, UK

- Managed 380GB+ of geospatial datasets(9 data archives) varying from GeoJSON, GeoPackage, shapefile, and raster file.
- Compiled **Microsoft's released dataset** of over 130 million building footprints in more than 30GB for the United States from GeoJSON files into state-specific GeoPackage formats, adding county code and name columns into each dataset.
- Authored a tutorial handbook for Overpass Turbo for extracting OpenStreetMap data for company training sessions.
- Solved multiple technical queries of 13 urban planners at HATCH Ltd. in training sessions delivered by Dr Alasdair Rae.
- Utilised QGIS for data capturing and observing spatial patterns in 5 projects.
- **Datasets Managed:** Local authority GIS, DEM & DTM elevation, raster, LiDAR, transport, population, building, greenspace, coastal, OpenStreetMap and 3rd party open datasets.

Spatial Data Analyst (Volunteer)
Cluster Innovation Centre, University of Delhi

Oct. 2023 - Present
India (Remote)

- Assisted a team of 4 researchers in environmental data collection, quality assurance and spatial analysis using ArcGIS Pro for the project of the Environmental Hazards and Risk Assessment of Indian Himalayas.
- Transformed and analysed Air quality time series dataset from CSV file (10 years) to shapefiles and predicted air pollutants and their impacts on human health using machine learning algorithms with Python.
- Mentored 2 research scholars on the use of GIS, which improved their grades from 63% to 75%.
- Communicated with 2 cross-functional teams with new analytical ideas for project development and research experience.

EDUCATION

University of Sheffield, UK
MSc. in Applied Geographic Information Systems (GIS)

Sept. 2022 - Nov. 2023
Merit

- Dissertation was selected for the best dissertation archive because of the unique approach towards spatial data gathering.
- Transformed 36 spatiotemporal geological datasets in vector and raster format and CSV tables into spatial databases.
- Gained fundamental knowledge of geospatial data and geographic concepts and utilised them for 3 client projects.
- **Analysis conducted using ESRI Products:** Climate change monitoring, vectorisation, spatial analysis, urban geoscience & risk analysis, environmental data visualisation, and building/vegetation index calculation using satellite imagery.

University of Delhi, India
BA (Hons) in Geography

July 2018 - Aug. 2021
2:1 Degree

- **Related Coursework:** Geomorphology & Biomes, Remote Sensing, GIS, Disaster management-based project work, Thematic cartography, Cartographic techniques, Climatology, Environmental Geography, Hydrology and Oceanography.

PROJECTS & EVIDENCES

Radiotherapy Centres accessibility | Client report experience |*QGIS, TravelTime Plugin, spatial data-based project* Oct. 2023
- Supported Dr Alasdair Rae and played a key role in improving geospatial data creation and analysis of hospital accessibility for the Radiotherapy4life Foundation as the client; Identified more than 30 constituencies, where residents do not appear to be able to reach a radiotherapy centre within 45 minutes with travel time analysis results and population dataset.

Geospatial sentiment mapping | Dissertation |*Python, data scraping, ArcGIS Pro, Pandas, ggplot2, RAP approach* Aug. 2023
- Evaluated the spatial patterns in human emotions by extracting data from X (Twitter) by developing advanced Python data scraping code scripts for geospatial data manipulation and analysis (data integration, querying and editing); Converted the temporal tweets data into shapefiles by adding spatial attributes.

Local authority GIS data | Enterprise data management |*QGIS, GDAL, command prompt, MS PowerToys* July. 2023
- Compiled repository data of more than 150GB from the Office for National Statistics and Ordnance Survey, split it by local authority, and then assembled it in folders for boundaries, buildings, greenspace, places, rail, roads, surface water, ward boundaries and terrain; Also created zipped file packages for every local authority area.

SKILLS & ABILITIES

Geospatial Tools: ESRI (ArcGIS Pro, ArcGIS Online), QGIS, remote sensing, Google Earth Engine, MapBox GL
Programming languages: Python, R, JavaScript, LATEX, SQL, Query Builder
Data extraction tools: Overpass Turbo, Snscrape, Scarpy
Analytical tools: MS Excel, Pandas, NumPy, ggplot2, FME, Power Query, GDAL, batch processing, geoprocessing
Self-dependency: Solely managed more than 18 projects as a geospatial analyst and 15 assessment reports in high quality throughout my academic year without any extensions.