



# Muhammad Junaid Baig

**Date of birth:** 25/06/2002 | **Nationality:** Pakistani | **Gender:** Male | **Phone number:** (+92) 3047335971 (Mobile) | **Email address:** [mirzajunaid887@gmail.com](mailto:mirzajunaid887@gmail.com) | **LinkedIn:** <https://pk.linkedin.com/in/muhammad-junaid-38b102247> | **Address:** Main Morgah Road, 46602, Rawalpindi, Pakistan (Home)

## ● ABOUT ME

Geospatial expert with hands-on experience in zoning data, cadastral mapping, and FTTH network planning across real estate, land administration, and telecom projects. Skilled in Python, Google Earth Engine (GEE), and remote sensing for geospatial automation, large-scale analysis, and data visualization. Proficient in ArcGIS and QGIS for georeferencing, raster mosaicking, topology validation, and spatial data standardization. Passionate about data integrity, workflow automation, and applying geospatial science to solve real-world challenges. Proven ability to deliver accurate, client-ready datasets that support decision-making, infrastructure development, and sustainable planning.

## ● WORK EXPERIENCE

 **ZONEOMICS U.S.LLC** – ISLAMABAD, PAKISTAN

**GIS ANALYST** – 12/2024 – CURRENT

- Acquired and standardized zoning datasets from official U.S. and Australian municipal sources for integration into Zoneomics real estate intelligence platform.
- Conducted rigorous quality assurance using GIS software to verify spatial accuracy, attribute completeness, and schema compliance.
- Developed and applied Python scripts to automate data validation, detect topology errors, and flag attribute inconsistencies, reducing manual QA time.
- Collaborated with data engineering and product teams to ensure zoning datasets met internal standards and client requirements.
- Delivered high-integrity spatial data that enhanced the accuracy and reliability of zoning insights for real estate decision-making.

 **R2V PVT.LTD** – RAWALPINDI, PAKISTAN

**GIS ANALYST** – 04/2024 – 11/2024

- Converted Rawalpindi Khasra cadastral records from raw image sheets into precise, georeferenced GIS datasets for land administration and planning.
- Designed and applied ground-referenced grids to align cadastral imagery with real-world coordinates, ensuring spatial accuracy.
- Performed georeferencing and digitization of parcel boundaries and attributes, adhering to cadastral mapping standards.
- Executed manual and automated quality assurance to validate topology, attribute completeness, and coordinate accuracy.
- Delivered high-quality cadastral datasets that enhanced land record management, urban planning, and decision-making processes.

 **COMPANY 19 PVT.LTD** – ISLAMABAD, PAKISTAN

**FTTH PLANNER** – 04/2022 – 12/2022

- Contributed to a Universal Service Fund (USF) initiative aimed at expanding digital connectivity and broadband access across regions of Baluchistan.
- Analyzed spatial and demographic data to identify unserved and underserved areas, supporting strategic planning for Fiber-to-the-Home network expansion.
- Utilized GIS tools for mapping, spatial analysis, and data visualization to support project reporting, stakeholder communication, and decision-making.

- Coordinated with engineering teams and project stakeholders to ensure alignment on data requirements, network design parameters, and project goals.
- Implemented quality control processes to validate spatial data accuracy, and relevance, enabling efficient resource and optimized network rollout.

## ● EDUCATION AND TRAINING

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2020 – 2024

**BACHELOR IN GIS & RS** PMAS Arid Agriculture University Rawalpindi

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2018 – 2020

**INTERMEDIATE IN COMPUTER SCIENCE** Govt. Post Graduate College Jhang

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2016 – 2018

**MATRICULATION IN SCIENCE** Afaq Public High School Jhang

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## ● LANGUAGE SKILLS

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Mother tongue(s): **URDU**

Other language(s): **ENGLISH** | **PUNJABI**

## ● SKILLS

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ArcGIS/QGIS | GIS Data Processing | Remote Sensing | Python Automation | Spatial Data QA | Zoning Data | Cadastral Mapping | FTTH Planning | Google Earth Engine | Arcmap | ESRI | Spatial Data Analysis | Quality Assurance | Geospatial Data Standards | Image Analysis | Raster to Vector | Vector to Raster

## ● PROJECTS

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**Time Series NDVI Analysis of Jhang using LANDSAT data.**

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**Watershed Analysis of Jhang using DEM.**

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**Monitoring of Deforestation of Faisalabad.**

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**Weighted Overlay Analysis.**

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**Landslide and Flood hazard analysis of Georgia and MALTA.**

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**Collected Air pollutants data of MALTA like NO2, CO2, SO4 etc.**

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**PTCL FTTx Design and Planning of Quetta.**

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**Solar Radiation estimation of Rahim-yar-khan.**

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**Spatial analysis of rainfall and temperature on Potohar region.**

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**Urban Planning of DHA Gujranwala.**

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**Water Quality Monitoring of Rawal dam using machine learning.**

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**Cadastral Mapping of Rawalpindi.**

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**Urban Growth Mapping of Babil, Iraq and Muscat, Oman**

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