

Affan Adly Nazri

Scientific Programmer • Research Software Developer • Open Source Contributor
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Scientific programmer with strong Python expertise and experience building data analysis pipelines, dashboards, and automated workflows for research and university operations. Background in astrophysics with proven ability to support research teams, manage technical projects, and translate complex data into usable tools for non-technical users.

EDUCATION

UNIVERSITI MALAYA

Ph.D. in Physical Sciences*

2022 - Now

Dissertation: "Study of Massive Young Stellar Objects: RCW 142"

UNIVERSITI MALAYA

B.Sc. in Physics

2018 - 2022

Thesis: "Fast Radio Burst Detection with Python Language Radio Burst Emission Automatic Roger"

CGPA: 3.94/4.00

AWARDS

- B.Sc. First Class Honours
- University Book Prize (2022)
- Dean's List (6 semesters)
- PASUM Top 20 (2018)

RESEARCH DOMAINS

- Radio astronomy data analysis
- Large-scale astronomical datasets
- Time-domain astrophysics
- Signal processing pipelines
- Scientific data management

PUBLICATIONS

More than 5 peer-reviewed journal articles in Q1 and Q2 journals. Full list available on Google Scholar

SERVICE ROLES

- Local Organizing Committee (Chair/Co-chair) for multiple international workshops
- Conference coordination, scheduling, and technical hosting
- Experience working with international collaborators and research institutions

LINKS

Github: [affanadly](#)

Google Scholar: [Affan Adly Nazri](#)

ORCID: [0009-0008-8190-1607](#)

Scopus: [58755071600](#)

SKILLS

PROGRAMMING & AUTOMATION

- Python (advanced): Data pipelines, automation, scientific computing
- C/C++ (intermediate)
- Shell scripting: Bash, C Shell, Windows Shell

DATA & VISUALIZATION

- NumPy, SciPy, Pandas, Astropy, scikit-learn
- Matplotlib, Seaborn, Plotly
- Large-dataset handling, reproducible workflows

WEB, DASHBOARDS, & INTERFACES

- Dash (data dashboards, internal tools)
- Selenium (web automation & scraping)
- Jupyter (interactivity, documentation, delivery)

DEVOPS, SYSTEMS, & INFRASTRUCTURE

- Version control and environments: Git, GitHub, venv
- Systems and virtualization: Linux, Windows, Docker, Proxmox VE, VirtualBox
- Networking: SSH, rsync, FTP/SFTP, SMB, WireGuard, Tailscale, Hamachi

DOCUMENTATION & PRODUCTIVITY

- Scientific and technical writing: \LaTeX , Markdown
- Dashboards and automation: Microsoft Excel, Google Sheets

SELECTED PROJECTS

AUTOMATED RFI MONITORING SYSTEM*

Developing a Python-based automated RFI monitoring system with remote data acquisition, scheduled pipelines, and dashboards for long-term site evaluation.

POSTGRADUATE STUDENT PROGRESS DASHBOARD

Built a Google Sheets-based dashboard integrating Google Forms data to automate postgraduate progress reporting and tracking, reducing administrative workload.

JOURNAL CLUB POSTER GENERATOR

Developed a Dash app that programmatically generates \LaTeX scientific posters, enabling standardized/reproducible poster creation for recurring academic events.

FRB DETECTION PIPELINE

Developed a standalone Python pipeline for FRB detection with performance comparable to established frameworks, emphasizing reliability, false-positive reduction, and reproducibility.

BLITZ.GG WEB SCRAPER & ANALYTICS TOOL

Built a Selenium-based web scraper and analytics tool for automated data collection from web-based gaming trackers, with analysis and visualization features.

WORK EXPERIENCE

RESEARCH ASSISTANT TRAINEE

Radio Cosmology Research Laboratory, Universiti Malaya

July - September 2021

- Assisted in grant preparation and documentation
- Maintained laboratory website and digital materials
- Supported student supervision and onboarding
- Provided technical and administrative support to research staff