

Major Tom (NASADataCopilot)

Your AI copilot for NASA data analysis

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Problem



- Current methods require human Expert manual validation
 - expert knowledge
 - cost of time and resources
- No tools available for non professionals
- Low explainability for the results and exponential growth of astronomical data



Solution

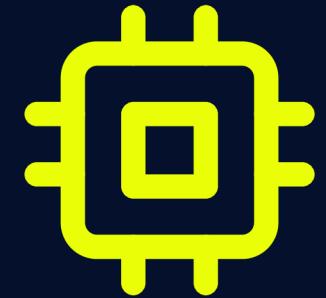


User-friendly and interactive tool based in AI that delivers:

- Fast and automated validations
- Clear and human-readable explanations
- Scalable design adaptable to each scientific level of the user



The Project



How it works:

- Takes satellite data but it's flexible with other data
- Cleans and validates variables
- Uses PCA for missing data
- Provides classification of AI models: XGBoost and Random Forest
- Optimization of parameters by applying Bayesian method
- Shap values for analysis result
- Interactive dashboard for results
- Chatbot as a user agent



value proposition



- Easy interaction with Language Model that creates a user-friendly experience
- Prepared for easy installation on local and Cloud using containers
- Improve knowledge space behaviour
- Let experimentize with new data



Target

- Educational systems(Science schools, PhD students...)
- Researchers
- Astrophysics
- Afficionates
- Private agencies based on space
- Public administrations



Outcome

Rapid, automated assurance

Efficiency and reliability

Effortless adoption, intuitive design

Ease of use and broad appeal

Deploy anywhere, start instantly

Speed of adoption and flexibility

Transparent, explainable results

Trust and clarity

Scalable design for everyone

Growth and universal value, bring science closer to people

