



## Personal information

Surname(s) / First name(s) Montesano, Francesco  
Address(es) München, Germany  
Email(s) franz.bergesund@gmail.com  
Nationality(-ies) Italian  
Date of birth Nov 18 1982  
Business networks LinkedIn, XING  
Website personal, company  
Github personal, pyds9  
StackOverflow profile

## Work experience

Date 2014 –  
Institute Max-Planck-Institut für Extraterrestrische Physik, Garching, Germany  
Occupation Software developer within the “HETDEX” collaboration:

- Data validation, analysis and visualisation
- Automatic scheduling
- Database design and administration

Date 2012 – 2013  
Institute Max-Planck-Institut für Extraterrestrische Physik, Garching, Germany  
Occupation Post-doctoral researcher in astronomy. Support software development:

- Data analysis, modelling and visualisation

## Education and training

Place and Date Ludwig-Maximilians-Universität, München, Germany, 2007 – 2011  
Title of qualification awarded Doctoral degree in Astronomy  
Place and Date Università degli Studi di Milano, Milano, Italy, 2004 – 2007  
Title of qualification awarded Master in Physics  
Place and Date Università degli Studi di Milano, Milano, Italy, 2001 – 2004  
Title of qualification awarded Bachelor in Physics

## Personal skills and competences

Programming languages

- Python (version 3.4 or later, 2.7): data organization, analysis and visualisation;
- C++: data analysis
- SQL (Oracle, SQLite3, MySQL): data storage and organization, including design and administration; peewee ORM
- Fortran 90 or later: data analysis
- Haskell, JavaScript: basic knowledge

Container and virtualisation	<ul style="list-style-type: none"> <li>• Docker, Docker SDK for Python</li> </ul>
Python packages and frameworks	<ul style="list-style-type: none"> <li>• Visualisation: PyQt4, matplotlib</li> <li>• Scientific software: numpy, astropy, scipy, pandas</li> <li>• Testing: pytest and plugins</li> <li>• Documentation: Sphinx</li> <li>• Miscellanea: ØMQ, transitions (state machine)</li> </ul>
Web development	<p>Basic knowledge:</p> <ul style="list-style-type: none"> <li>• Back-end: Python, including Flask framework, Jinja</li> <li>• Front-end: HTML, CSS and JavaScript, including Bootstrap framework and JQuery library</li> </ul>
Main tools and workflow	<ul style="list-style-type: none"> <li>• Operating system: Linux (Kubuntu and OpenSuse), Mac OSX</li> <li>• Editor: vim</li> <li>• Scripting: Bash</li> <li>• Version control systems: git, Subversion</li> <li>• Continuum integration: Travis CI, AppVeyor</li> <li>• Project management: Redmine, Github</li> <li>• Basic knowledge of SCRUM</li> </ul>
Organisational skills and competences	<p>Responsible for the design, development and delivery of two key products for the validation and analysis of HETDEX data. Main contact point between our software team in Munich and the collaborators and project PIs in Austin, TX, USA.</p>
Technical skills and competences	<p>Data analysis and modelling.</p>
Mother tongue(s)	<p>Italian</p>
Other language	
English	Full proficiency
German	Working proficiency
French	Basic knowledge
Personal interests	<p>Cooking, reading and coding</p>