

Curriculum vitae

PERSONAL INFORMATION

Daniel Marsh-Hunn



- Merzhauserstraße 10, 79100 Freiburg im Breisgau (DE)
- ✓ danji_ma90@hotmail.com
- 1 https://danji90.github.io

Gender Male | Date of birth 13.09.1990

WORK EXPERIENCE

Mai 2019 - present

Frontend Web Developer

geOps, Freiburg (DE)

- UI component engineering for geOps libraries and applications
- Continuous Integration (CI) in geOps web applications
- App quality assessment with Unit and E2E tests
- Building web-GIS components using open-source libraries
- Writing Blog articles for the geOps blog

January 2017 - July 2017

Researcher

EURAC Research - Institute for Earth Observation, Bolzano (Italy)

- Establishment and maintenance of Sensor Observation Service (SOS) web platform and database via SQL and python
- Automated file and database population processing via python scripts
- Development and maintenance of Web-GIS applications

March - June 2016, October -December 2016

Intern

EURAC Research - Institute for Earth Observation, Bolzano (Italy)

- Management of heterogeneous environmental data from in-situ monitoring stations
- Database management for Sensor Observation Service (SOS) in Environmental/Agricultural applications with PostgreSQL/PostGIS
- SOS database design and implementation
- Maintenance of environmental monitoring sensors on ground stations

EDUCATION AND TRAINING

September 2017 - March 2019

MSc - Erasmus Mundus Master in Geospatial Technologies

Universitat Jaume I - Universidade Nova de Lisboa - Universität Münster

- Erasmus Mundus Scholarship Holder
- Subjects and skills: Programming, Spatial Databases, Software Engineering, Applied Mathematics and Statistics, Spatial Analysis, Spatial Data Visualisation, Web and Mobile GIS development, Remote sensing, GIS Servers, Spatial Data Infrastructures, Python in GIS, Location-Based Services, Unmanned Aerial Systems, Usage-Centered Design of GIS applications, Advanced Research Methods and Skills, Spatial Data Analysis in R, Sense-Box, Project Management
- Thesis: Interoperability Enhancement of IoT Devices Using Open Standards in a Smart Farming Use Case

August 2016 Certificate of Bilingualism (Italian-German): Patentino A

BSc - Environmental Systems Sciences (focus on Geography) 2011 - 2016

Karl-Franzens University of Graz (Austria)

- Subjects and skills: Environmental Sciences, Systems Sciences, Mathematics and Statistics, Ecology, Sustainable Development, Interdisciplinary Research, Geoinformatics, Geographical Technologies, GIS, Remote Sensing, Cartography, Physical Geography, Human Geography, Integrative Geography
- Thesis: Investigating rockfall at alpine rock walls using Terrestial Laser Scanning

July 2015

Certificate in English Language Teaching to Adults (CELTA) - Pass with grade A (distinction)

PERSONAL SKILLS

Mother tongue(s)

English, German

Other language(s)

Italian Spanish French

UNDERSTANDING		SPEAKING		WRITING
Listening	Reading	Spoken interaction	Spoken production	
C2	C2	C2	C2	C1
C1	C1	C1	C1	C1
A2	B1	A2	A2	A1

Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2: Proficient user

Common European Framework of Reference (CEF) level

Communication skills

Good communication and team work skills gained in my educational and professional careers, in sport (climbing, diving) and while travelling

Organisational / managerial skills

Organisation and management skills acquired in group projects during the university career (e.g. GeoMundus Conference 2018) and in the geOps frontend team

Job related skills

■ Web services:

- Git (GitLab, GitHub)
- Cloud hosting (e.g. Heroku, GCP, vercel)
- WMS, WFS (eg. GeoServer)
- OGC sensor standards: Sensor Observation Service (e.g. 52North-SOS, ist-SOS), SensorThings API (e.g. FROST
- rabbitMQ: MQTT for IoT communication
- R (Shiny Apps)
- · Google API (maps, charts, fusion table...) and SDK (Google Cloud Platform)

■ Programming:

- Databases: SQL and NoSQL (MongoDB)
- Frontend development: JavaScript ES6 (ReactJS, AngularJS, VueJS, Leaflet, mapbox-gl/maplibre-gs, Openlayers, node.js, express.js, MUI, next.js), CSS (Bootstrap, JSS, SASS, Tailwind), HTML5, TypeScript,
- Spatial/Data Analysis: R, Python (GDAL, pyQGIS, OGR, ArcPy, pandas, numpy)

- Backend development: Python (Django), **Docker Containers**
- Arduino
- Hardware: LiDAR laser scanners (Riegel), Unmanned Aerial Vehicles, microprocessor boards and environmental sensors

■ Software:

- · Geographic Information: ArcGIS (Desktop, Pro, Servers, Online), QGIS, ER-DAS Imagine, PCI Geomatica, RStudio, RiScan Pro, CloudCompare, PostGIS, MongoDB Compass
- Databases: PostgreSQL, PgAdmin, MongoDBCompass
- IDEs: Notepad++, Atom, Eclipse, Py-Charm, Sublime, VSCode
- Mobile: Android Studio
- Dynamic systems simulation: Vensim, Netlogo
- Operating Systems: Windows and Linux (Centos, Ubuntu)

Driving licence

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