



Palacký University Olomouc

Department/division: Department of Geoinformatics/Eye-tracking Laboratory

The Department of Geoinformatics is engaged in the wide area of cartographic research topics. Feeling the absence of objective evaluation of cartography products, since June 2011 we have started the research on cognitive visualization using eye-tracking. Research orientation of our group is the application of the eye-tracking technology and cognitive sciences in the field of evaluation and optimization of maps.

The team is formed by young scientists interested in different aspects of geographic information visualization. Research topics deal with cognition of maps complexity, 3D visualization, uncertainty, map elements and layout and other themes, leading us to the only aim – to do better maps.

Detailed information about our research is available at: <http://eyetracking.upol.cz/>.

Position title: Software Developer for the Eye-tracking Laboratory

Position purpose: To participate in research in the field of cognitive cartography via development of tools for eye movement data conversion and analysis. Currently, we are using several online conversion tools developed in PHP (<http://eyetracking.upol.cz/tools/>). These tools are able to convert data to/from SMI, OGAMA, Tobii Pro, GazePoint and V-Analytics. We would like to add some new (conversion from PupilLabs) and ideally merge all these tools into one robust solution capable of converting files recorded using different types of eye-trackers.

The trainee will get insight into eye movement data recording and will get familiar with different types of eye-trackers.

Duties and responsibilities:

- Developing eye movement data conversion tools
- Merging existing tools into one robust solution
- Extending the functionality of tool ET2Spatial

(<https://www.geoinformatics.upol.cz/dprace/magisterske/sultan21/>)

Qualifications

Field/s of study:

- Software and applications development and analysis
- Earth sciences (Geoinformatics with focus on programming skills)

Level of study: master

Professional competences:

- Programming skills (HTML, PHP, Python)

Key competences/Language skills:

- English – A2-B2 – Elementary-Upper intermediate (Required)
- Czech – A2 – Elementary (Preferred)



Key competences/Computer skills:

- Word processing, Spreadsheets, Presentation – Independent user
- Programming skills (HTML, PHP, Python) – Proficient user

Key competences/Other:

- Communication
- Critical and analytical thinking
- Planning and organizing
- Creative thinking
- Teamwork
- Intercultural perception
- Initiative
- Reliability

How to apply

Please send CV and cover letter (in English) to Stanislav Popelka, stanislav.popelka@upol.cz at least 2 months before planned traineeship start.

Facts

Economic sector: Tertiary education

Size: staff 2 001 to 5 000

Working language/s: Czech, English

Type of work placement: Traineeship

City/Country: Olomouc/the Czech Republic

Earliest start date: 16/05/2022

Latest start date: 01/06/2023

Duration: 3 months

Working hours: 35 hours/week

Remuneration:

Financial contribution: 0 EUR/month

Contribution in kind: none

Application

Required application documents: CV, cover letter (in English) to be sent to Stanislav Popelka,



Palacký University
Olomouc

STUDENT MOBILITY –
TRAINEESHIP



Co-funded by the
Erasmus+ Programme
of the European Union

stanislav.popelka@upol.cz

Application deadline: at least 2 months before planned traineeship start