

Opis raziskovalnega dela (*Research work description*)

1. Članica UL (*UL member*):

Univerza v Ljubljani, Fakulteta za gradbeništvo in geodezijo
University of Ljubljana, Faculty of Civil and Geodetic Engineering

2. Ime, priimek in elektronski naslov mentorja/ice (*Mentor's name, surname and email*):

Prof. dr. Žiga Turk, ziga.turk@fgg.uni-lj.si

3. Raziskovalno področje (*Research field*):

Gradbena informatika / Construction informatics

4. Opis raziskovalnega dela (*Research work description*):

Vključuje morebitne dodatne pogoje, ki jih mora izpolnjevati kandidat/ka za mladega raziskovalca/ko, ki niso navedeni v razpisu za mlade raziskovalce (*It includes any additional conditions that the candidate for a young researcher must meet, which are not listed in the call to tender for young researchers.*).

Slov.: Raziskovalno delo bo usmerjeno v nadaljnji razvoj integracije med velikimi jezikovnimi modeli (LLM) in okolji za informacijsko modeliranje gradenj (BIM), s posebnim poudarkom na razvoju in preizkušanju dvosmernih, pogovornih delotokov, ki izboljšujejo produktivnost načrtovanja ter interoperabilnost med različnimi platformami. Od raziskovalca se pričakuje znanje s področja umetne inteligence ter poznavanje programske opreme in standardov BIM (npr. Revit, IFC). Kandidat mora imeti ali pridobiti programerska znanja, zaželeno je poznavanje digitalnih gradbenih procesov ter sposobnost sodelovanja tako z akademskimi kot z industrijskimi partnerji. Zaželene so predhodne izkušnje na področju raziskav AI-BIM, razvoja programske opreme za načrtovalska orodja ali na področju gradbene informatike.

Eng.: The research will focus on advancing integration between Large Language Models (LLMs) and Building Information Modeling (BIM) environments, with particular emphasis on developing and testing bidirectional, conversational workflows that improve design productivity and interoperability across platforms. The researcher will be expected to combine expertise in AI (natural language processing, model integration) with knowledge of BIM software and standards (e.g., Revit, IFC). Candidates are expected to have or be able to gain programming skills, familiarity with digital construction workflows, and the ability to collaborate with both academic and industry partners. Prior experience in AI-BIM research, software development for design tools, or applied construction informatics will be considered an asset.

5. Priloge, ki jih kandidat priloži k prijavi (*Documents that the candidate submits with the application*):

☒ **diplomska listina/potrdilo o zaključku študijskega programa** (*diploma certificate for study programme, with which the candidate has enrolled/ will enroll in a doctoral degree programme*)

☒ **priloga k diplomi/ potrdilo o opravljenih obveznostih** (*official transcript of all the grades for study programme, with which the candidate has enrolled/will enroll in a doctoral degree programme*)

☒ **potrdilo o do sedaj opravljenih obveznostih z ocenami študijskega programa, s katerim se bo kandidat prijavil na študij** (*official transcript of all the grades the candidate has received so far for the study programme, with which the candidate will enroll to a doctoral degree programme*)

☐ **nagrade** (*awards (e.g. Prešeren Prize of the University of Ljubljana, Prešeren Prize of a University of Ljubljana member and/or another equivalent award)*)

☒ **bibliografija** (*bibliography*)

☒ **življenjepis** (*CV*)

☒ **motivacijsko pismo** (*motivation letter*)

☒ **opis dosedanjega sodelovanja pri raziskovalnem delu** (*description of the candidate's research work*)

☒ **osnutek idejne zasnove raziskovalnega dela** (*preliminary research proposal*)

☒ **priporočilno pismo** (*letter of recommendation*)

☒ **druge priloge** (*other attachments*)