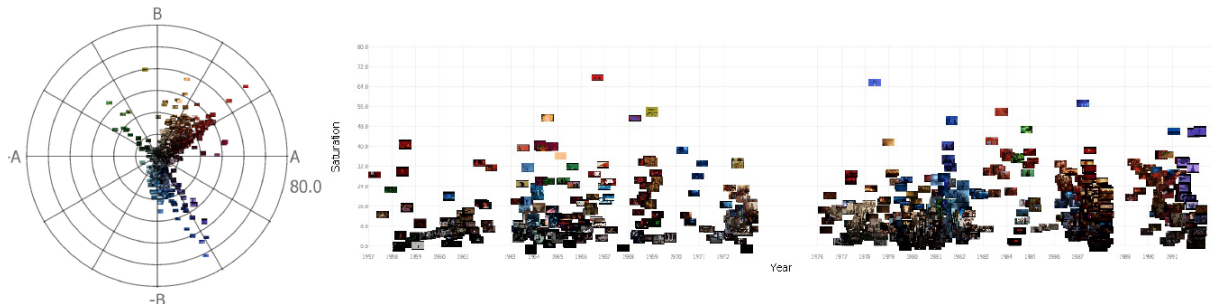


Research Assistant - PhD Student

in Computer Science, Visual Analytics, Data Science



Job Summary

Open position for a PhD student in the area of multidimensional data analysis and visualization at the University of Zürich. This position is for a PhD student participating in a SNF (Swiss National Science Foundation) funded joint project between UZH and EPFL.

Description

The open position is for a research assistantship in a PhD program in computer science with a focus on interactive visual data analysis and visual analytics of large audio-visual movie archives. This project is specifically targeted at the interactive analysis and visualization of large movie collection datasets, covering aspects such as the analysis of spatial, temporal, visual, emotional and aesthetic features in image and video composition. A central focus is on visual analytics techniques to identify e.g. different types of temporal scale, coexisting timelines and chronologies, ambiguity and uncertainty, novel visual search metrics and query techniques in novel sequential or non-linear ways.

The project requires strong interest not only in visualization or 3D graphics, algorithms and data structures, but also in image and video processing, as well as numerical data processing and analysis methods, such as e.g. dimensionality reduction or data compression. Furthermore, good software programming skills are required as well as a strong willingness and ability to learn new mathematical methods and complex software frameworks or 3rd-party code is highly recommended. Good C/C++ and Python skills are needed.

The activities of the position not only include research and continuing education for PhD students, but also support in teaching as well as administrative tasks. The main goal is to conduct excellent research generating results which are published and presented in top international journals and conferences, and to eventually work towards achieving a PhD degree through the writing and defense of a doctoral dissertation.

Company

The University of Zurich (UZH) is a top internationally recognized research university with faculties in medicine, humanities, economics as well as mathematical and natural sciences. UZH is the largest university in Switzerland and regularly ranked among the top world leading research universities, e.g. according to the Academic Ranking of World Universities by Shanghai Jiao Tong University, and has recently been ranked 58th in the world (18th in Europe, 2nd in Switzerland) in 2017. The Department of Computer Science (Institut für Informatik – IfI) covers major computer science, software engineering and information management research and teaching topics, it offers BSc, MSc as well as PhD degrees in informatics/computer science.

Workplace

The Visualization and MultiMedia Lab (VMML) and IFI, are located in the vibrant city of Zürich as part of the university's new Nord-Campus in Oerlikon in a renovated modern office building. The UZH Nord-Campus is conveniently located a short walk off the Max-Bill Platz, center of the new trendy living, shopping and business district in Oerlikon, as well as near the Oerlikon train, S-Bahn and tram stations. Also the Zürich international airport (ZRH) is reachable within minutes with public or private transportation.

Benefits

Research assistants, PhD students are remunerated according to university regulations and standards from the funding agencies (SNF). Appointments will be made with respects to standard university rules, same applies for fringe benefits and vacation days. Appointments are expected to involve a full-time effort in research, graduate education, teaching and community service.

It is the goal of UZH to offer an equal opportunity workplace environment and as part of this we strongly encourage women to apply. Specific benefits include flexible working hours, young scientist promotion opportunities, parental leave benefits, nursery services and care for dependents and much more.

Comment/web site for additional job details

For application and further information contact: Prof. Renato Pajarola, pajarola@ifi.uzh.ch

See also our research groups website at <http://vmml.ifi.uzh.ch/>.

Requirements

A MSc degree in computer science or closely related area from a top research university is required to enter our PhD program. A prior focus on or experience with interactive data visualization or computer graphics, as well as good math skills and excellent programming skills are also required.

The prospective candidates are supposed to have an excellent background in computer science as well as good mathematical skills and practical experience in interactive visualization and 3D graphics. Strong interests in data analysis, numerical methods and collaboration with other researchers and domain scientists is of further importance. Furthermore, the ability to work with and integrate diverse programming frameworks is of great benefit.

Applications must include a detailed CV/resume, information of university level educational background, brief description of practical work and research experience in computer science, clear exposition of prior visualization or graphics experience, as well as a short statement of motivation and goals. Certified copies of transcripts, degrees and reference letters may eventually be required for admission to the PhD program.

Dates and More

- Entrance is estimated for September 2021 but subject to the successful evaluation of candidates
- Duration is expected to be about 4 to 5 years for PhD students

Contact

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