

Applications are invited for a Data Analyst/Computer Scientist to work for an ERC Project at Koç University, Istanbul

The European Research Council (ERC) project *Industrialisation and Urban Growth from the mid-nineteenth century Ottoman Empire to Contemporary Turkey in a Comparative Perspective, 1850-2000* at Koç University under the direction of M. Erdem Kabadayı is offering up to a 5-year full-time employment opportunity for a talented, skilful and versatile computer scientist beginning in October 2016. The Cambridge Group for the History of Population and Social Structure, (Campop, <http://www.campop.geog.cam.ac.uk>) of the University of Cambridge is an official partner of the project and a close collaboration with the Campop will be a distinctive feature of its comparative research agenda. The members of the project research team will take part in the first ERC project in the field of history implemented in Turkey and the first ERC project on economic and social history of the late Ottoman Empire and twentieth-century Turkey. Successful applicant will be given a work place at Koç University.

The project aims to contextualise and compare changes in occupational structure and urban growth trajectories across time and space. To reach this aim solid and detailed datasets of occupational structure and historical demographics for a very large part of the Ottoman Empire in the 19th century and for the entire Turkey in the 20th century will be constructed. This project is an attempt at bringing Ottoman/Turkish history into the newly emerging field of digital humanities. It will use advanced techniques of spatial and geometric data analysis in conjuncture to answer long debated research questions and to formulate and work on new ones for the social and economic history of the Ottoman Empire and the Republic of Turkey.

The computer scientist will be responsible for the construction of a digital research infrastructure. A proper software engineering phase is needed to achieve a variety of tasks such as applying OCR techniques, designing tools for data entry, data pre-processing, data transformation and other data mining tasks such as clustering and the machine learning algorithms. The computer scientist will be in charge of the following software engineering tasks: drawing software use-cases, designing entity-relationship models for the databases, coding the database functions in SQL, implementing other software sub-modules, developing user-friendly interfaces, adapting OCR libraries, applying unit test and maintenance and the construction of the website.

The computer scientist will be offered to be an active member of an international research team and participate in project's seminars, conferences and other academic activities.

The required criteria and documentation to apply for the fellowships:

- Proven accomplishment and having potential for further advancement in the field of computer science.
- Working knowledge and experience in current programming languages and environments for statistical computing and graphics, especially Python 3 and R.
- Fluency in oral and written English and Turkish.

- A detailed motivation letter (max 3 pages)
- Curriculum vitae (including detailed knowledge on programming skills and experience, max 3 pages)
- Names of two possible referees

Please send materials electronically in one file or folder to:
M. Erdem Kabadayı, mkabadayi@ku.edu.tr by August 1, 2016

For additional information about the project please contact M. Erdem Kabadayı
<http://mysite.ku.edu.tr/mkabadayi/>

<https://cssh.ku.edu.tr/en/people/personel-detail/?user=mkabadayi>