Koç University

- Location: Sariyer, Topkapi Istanbul, TURKEY
- Application Deadline: Open Until Filled

Job Description

Employer Description Prof. Dr. Hakan Urey Optical Microsystems Laboratory

Cataract is the cloudy area in the eye lens and cause blurry and poor vision. There are more than 50 Million surgeries performed annually (world's most common surgery). However, Severity of side-effects and improvement in vision vary from patient to patient and cannot be predicted before surgery. This project is funded by the European Innovation Council (EIC) and aims to develop a novel optical diagnostics device for use before the cataract surgeries in the ophthalmology clinic. The device will show patients how they will see after surgery with different intraocular lens (IOL) options.

Job Description

We are looking for a Full Stack Developer to produce scalable software solutions in the area of Katarakt Simulation Medical device is available in the Optical Microsystems Laboratory (<u>mems.ku.edu.tr</u>) and Koç University Hospital Ophthalmology Clinic. You'll be part of a cross-functional team that's responsible for the full software development life cycle, from conception to deployment. As a Full Stack Developer, you should be comfortable around both front-end and back-end coding languages, development frameworks and third-party libraries. You should also be a team player with a knack for visual design and utility.

If you're also familiar with Agile methodologies, we'd like to meet you.

Responsibilities

- Work with development teams and researchers to ideate software solutions
- Design client-side and server-side architecture
- Build the front-end of applications through appealing visual design
- Develop and manage well-functioning databases and applications
- Write effective APIs
- Test software to ensure responsiveness and efficiency
- Troubleshoot, debug and upgrade software

- Create security and data protection settings
- Build features and applications with a mobile responsive design
- Write technical documentation
- Work with data scientists and analysts to improve software

Requirements and skills

- Proven experience as a Full Stack Developer or similar role
- Experience developing desktop and mobile applications
- Familiarity with common stacks
- Knowledge of multiple front-end languages and libraries (e.g. HTML/CSS, JavaScript, XML, jQuery)
- Knowledge of multiple back-end languages (e.g. C#, Java, Python) and JavaScript frameworks (e.g. Angular, React, Node.js)

Recent publications from our group include:

- Koray Kavaklı, Güneş Aydındoğan, Erdem Ulusoy, Cem Kesim, Murat Hasanreisoğlu, Afsun Şahin, and Hakan Urey, "<u>Pupil steering holographic display for pre-operative vision screening of cataracts</u>," Biomed. Opt. Express 12, 7752-7764 (2021)
- <u>Vision simulator for cataract screening using holographic near-eye display with pupil tracker</u> ARVO Annual Meeting Abstract, June 2021
- Güneş Aydındoğan, Koray Kavaklı, Afsun Şahin, Pablo Artal, and Hakan Ürey, "<u>Applications of</u> <u>augmented reality in ophthalmology [Invited],"</u> Biomed. Opt. Express 12, 511-538 (2021)

Compensation: Depending on experience plus benefits.

Contact Information

Interested candidates are encouraged to send a CV and a cover letter describing any previous experience, training, specific areas of interest. Address correspondence to Ms. Gamze Yilmaz, <u>gamyilmaz@ku.edu.tr</u>