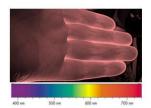
Ph.D. Student Research Assistant Position

Starting Summer or Fall 2020 / Prof. Hasan Ayaz @ Drexel University, Philadelphia, PA, USA

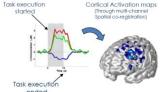
Would you like to <u>develop neurotechnologies</u> and <u>study the human brain</u> at one of the top biotech hub city of the United States of America?

Fully-funded Ph.D. student positions are available to work in the emerging and cutting-edge neurotechnology research on wearable functional neuroimaging, brain-computer interfacing, machine learning, neuroergonomics and mobile brain/body imaging at Drexel University in Biomedical Engineering. Successful candidate fulfills requirements for graduate studies at Drexel University and the School of Biomedical Engineering, Science and Health Systems.

If interested, contact Prof. Ayaz at ayaz@drexel.edu









The applicant will carry out research activities and write a thesis, the main goal is to obtain a Ph.D. in the area of Biomedical Engineering with a focus on applications of wearable and portable functional neuroimaging / multimodal neuroimaging (functional near-infrared spectroscopy, fNIRS and electroencephalogram, EEG), biomedical signal processing, brain-computer interfaces, and Neuroergonomics. Applicants are expected to have or be in the process of completing B.Sc. and/or M.Sc. from relevant fields including but not limited to Electrical and Electronics Engineering, Computer Science, Computer Engineering, and Biomedical Engineering. Successful candidates are expected to demonstrate strong analytical and computational expertise and excellent communication skills.

Research Assistant position responsibilities include conducting literature surveys and establishing state-of-the-art; developing necessary experimental and simulation facilities where required; planning, executing, and analyzing experiments and simulations; conducting joint and independent research activities; contributing to project deliverables, milestones, demonstrations, and meetings; disseminating results at international scientific conferences/workshops and peer-reviewed scientific publications. For information about Drexel's School of Biomedical Engineering, Science and Health Systems, see www.drexel.edu/biomed/ and for CoNQuER Collaborative see www.drexel.edu/conquer/

Prof. Ayaz's group currently consists of 13 graduate students, along with an extended collaborator team of neuroengineering, neuroscience and clinical faculty distributed globally. See more at Google Scholar, Frontiers Loop, ResearchGate, Pubmed and Publons.

Representative publications

- ■[Book] Neuroergonomics: The Brain at Work and Everyday Life. (2019) Elsevier Academic Press
- •[Paper] Enhancing neural efficiency of cognitive processing speed via training and neurostimulation: An fNIRS and TMS study. (2019) Neuroimage
- [Paper] In silico vs. Over the Clouds: On-the-Fly Mental State Estimation of Aircraft Pilots, Using a Functional Near Infrared Spectroscopy Based Passive-BCI. (2018) Frontiers in Human Neuroscience
- [Paper]Measuring speaker-listener neural coupling with functional near infrared spectroscopy (2017) Scientific Reports



Prof. <u>Hasan Ayaz</u> graduated from Bogazici University, Electrical and Electronics Engineering with high honors in 2003.



Philadelphia skyline: As one of the country's first major cities, Philadelphia has long been a city of innovation. See big4Bio and recent news to see examples of why Greater Philadelphia is a booming biomedical research and technology hub.

Neuroergonomics