

Open Position for Frugal Engineering Research

The Bhamla Lab at Georgia Tech is at the vanguard of developing extremely low-cost tools to address challenges in global health as well as democratizing access to science education. With more than one billion people living on less than a few dollars a day, the Bhamla Lab aims to develop inexpensive technologies that cost pennies and can scale up to impact billions.

Our mission is to make medical technologies and scientific hardware accessible to people around the world through radically transformative and creative engineering approaches. The lab has developed 20-cent paper centrifuges for disease diagnosis, 3d-fuges for in-situ genomics in field settings, electroporators for non-viral delivery of gene-based medicines, and a \$1 hearing aid for addressing age related hearing loss in elderly patients.



Figure 1: Low-cost hearing aid (LoCHAid). Sinha et al. PLOS ONE (2020)

We are currently hiring researchers and engineers at all levels (BS, MS, Postdoc) to develop a frugal hearing aid platform.

Benefits. Join an exciting, diverse and multidisciplinary team of engineers and scientists focused open hardware development. Learn development, clinical evaluation and translation of low-cost hardware. Work closely with our clinical partners in low-and middle-income countries (LMIC) as well as social ventures for bringing technology to market in LMIC context. Collaborate and mentor students in Georgia Tech's School of Chemical and Biomolecular Engineering, ranked #2 and #5 for undergraduate and graduate studies, respectively. Live in thriving Atlanta, the 'city in the forest', with access to fantastic food, music, hiking and weather.

Requirements. Training, experience and success in hardware design/development. Experience in microelectronics and digital signal processing is plus, but not required.

You will. Design and develop low-cost hearing aid hardware, advancing our existing prototypes (see Sinha et al. PLOS One (2020)). Work with audiology partners for in-lab testing and clinical evaluation. Supervise/collaborate with other researchers on smartphone-based hearing aid screening platforms.

Apply. Applications are currently being accepted (as of March 15, 2021) and will be evaluated on a rolling basis with the goal of hiring as soon as possible. The position is available immediately, although the start date is negotiable. The position is based on current funding for a two-year position. The initial appointment will be for 12 months with the possibility for renewal contingent on performance and continuing funding availability for up to 2 years.

Email saadb@gatech.edu with application materials including CV and pdf or link to portfolio/pre-prints of your scientific work and projects.