Asif Jamil

EDUCATION

University of Göttingen, Göttingen, Germany
      Ph.D, Neuroscience (Expected 2016)
King's College London, Institute of Psychiatry, London, United Kingdom
      MSc, Neuroimaging (Sept, 2012)
University of Maryland, College Park Maryland, United States
      BSc, Biology (May, 2011)
      Member of College Park Scholars, Life Sciences
      Awards: Susan McComas Senatorial Scholarship (2007); Dr. Abdus Salaam Award &
      Scholarship (2007); Dean's List; President's Volunteer Service Award (2010)
Publications: Poster at the 2010 SICB Conference ("3D reconstruction of one-eared and two-eared Praying Mantises"); Poster at the 2011 University of Maryland Bioscience Day ("Hearing in the Praying Mantis"); Poster at the 2009 College Park Scholars Presentation Day ("Development of DNA Electrofractionation System").

RESEARCH

January 2012 - August 2012
Research Student, "Enhancing Working Memory in Healthy Controls by applying transcranial Direct Current Stimulation (tDCS)" King's College, London.
      - Performed a neuroimaging study to investigate the effects of non-invasive brain stimulation in improving working memory. The study was part of a larger ongoing study to investigate tDCS as a therapy for patients deficient in this ability (ex: depression, Alzheimer's, schizophrenia).
      - Applied 2-mA tDCS stimulation for 20 minutes for each subject while being scanned inside of a 3-tesla MRI scanner.
      - Analyzed the resulting data with SPM-8 (Statistical Parametric Mapping) for BOLD analysis and SPSS for statistical analysis.
      Skills: tDCS application and safety, MRI application, SPM (MATLAB) analysis, SPSS statistical analysis.

December 2009 - May 2011
Research Student, "3D Auditory Reconstruction of Praying Mantises." University of Maryland
      - Worked with neurophysiology professor to study the *meso* and *meta* ear of different species of Praying Mantises to understand vital auditory processes of ultrasound perception.
      - Traced and triangulated different sets of two-dimensional x-ray synchrotron images of mantises prepared by Argonne Laboratory in Chicago to to create a 3D model of the organism.

- Performed additional studies to calculate the distances in the tracheal air sacs so that a hearing frequency function could be computed.
Skills: Amira 3D Software, Blender 3D Software, GNU Image Manipulation (GIMP)

January 2010 - May 2010
Research Student, "The Role of Phenology in Competitive Interactions Between Native and Invasive Herbaceous Species." University of Maryland
- Worked with a graduate student at University of Maryland, College Park to identify how growth and flowering time affects competition between plants
Skills: Seed harvesting, seed counting, performing Nitrogen/Carbon/Phosphorous tests, seed measurements

June 2006 - Aug. 2006
Biological Engineering Intern, RDECOM-ARL, Aberdeen Proving Ground, Edgewood, MD
- Worked with a Biologist to experiment with DNA Electrophoresis in first understanding the behavior of DNA in complex samples of microorganisms.
- Devised an Electrofractionation System that could increase the yield of DNA extraction as a cost-effective solution as opposed to commercial methods of DNA extraction.
Skills: DNA Electrophoresis, Spectrophotometry

June 2005 - Aug. 2005
Microbiology Intern, RDECOM, Aberdeen Proving Ground, Edgewood, MD
- Worked with a senior biologist and his team of four to test the efficacy of chlorine dioxide gas fumigation on Anthrax spores.
- Generated a detailed report outlining the fumigation techniques and the relative success rate in destroying Anthrax colonies.
Skills: Gel Plating, Spore Inoculation, Gas Fumigation

TECHNICAL

October 2011 - Present
Software engineer, GoSquared Ltd., London, United Kingdom.
- Contracted with a web analytics startup, "GoSquared", to develop a front-end application which would display the real-time metrics of visitors on any given website.
- Developed the "Home" area of the web app, based heavily on BackboneJS and running on an Express server using NodeJS.
- Actively developing the "Dashboard", a collection of real-time streaming data widgets which display custom website metrics
Skills: Javascript programming (BackboneJS, D3.js, NodeJS, jQuery), NoSQL (Redis, MongoDB), Cloud-Server deployment (Heroku, Amazon EC2), Source-control workflow (Git)
Website: http://www.gosquared.com

Skills: Javascript Programming, No-SQL (Document-oriented) Database Management, Cloud server hosting

December 2010 - Present
Co-Founder and Front-end Developer of web-technology startup, *Beagle*, at Maryland
- Co-founded a mobile technology startup which serves to crowd-source a user tasks in a micro-payment community marketplace
- Developed the front-end website for the company (www.getbeagle.com) and set up underlying server technology for easy scalability
- Developed the core web application using NodeJS, MongoDB, and Heroku.
Skills: Javascript Programming, No-SQL (Document-oriented) Database Management, Cloud server hosting

November 2010 - May 2010
IAP Computer Programmer for USGS Bird Phenology Program at Patuxent Maryland
- Used geo-spatial mapping software (ARC-Gis, Q-Gis) to plot and analyze the migration patterns of over 800 species of birds in the North America.
- Developed a comprehensive crowd-sourced web application for transcription of over 3 million historic bird observation cards.
- Analyzed existing data using MS-SQL Server to quantitatively assess climate change impact on bird migrations over the last century.
Skills: ARC-GIS, Q-GIS, Microsoft SQL Server 2005

January 2010 - Present
Website Developer of March of Dimes Collegiate Council at University of Maryland
- Developed the website for March of Dimes University of Maryland Collegiate Council (http://www.modumd.org)
- Created custom email accounts for executive officers
Skills: Joomla, HTML/XHTML/CSS/PHP designing languages, Google Apps

September 2007 - Present
Help Desk Technician, Website Developer & Network Manager, Nyumburu Cultural Center, UMD
- Developed the website for the University of Maryland's Nyumburu Cultural Center (nyumburu.umd.edu).
- Worked with multiple workstations and computer labs to provide technical support and manage network.
Skills: Windows NT Networking, IIS Web Server, MySQL, PHP, Joomla!, Photoshop, Dreamweaver