Amanveer Wesley **Curriculum Vitae**

CONTACT INFORMATION

E-mail: awesley4@uh.edu
Cellphone: +1-832-998-4076
URL: http://cpl.uh.edu/people/amanveer_wesley

RESEARCH INTERESTS

Computational Physiology, Deep Learning, Affective Computing, Signal Processing, Human-Computer Interaction, IoT

EDUCATION

Ph.D., Computer Science, University of Houston — Aug 2016 – **pressent**
- Advisor: Professor Ioannis Pavlidis
- Research Topic: Signal processing

M.S., Statistics, St. John's College, Agra. India — June 2013 – Aug 2015
- Advisor: Dr. Sanjay Jain
- Research Topic: Bayesian Analysis
- Final Grade: A (First Class)

B.S., Mathematics, St. John's College, Agra. India — May 2010 – May 2013
- Minor in Computer Science
- Final Grade: A (First Class)

CERTIFICATIONS

[1] R Programming. *Johns Hopkins University* (distinction).

[2] Human Research Investigation. *CITI - University of Houston* (distinction).

COMPUTER SKILLS

Programming Languages and Environments
- Python, R

Software Tools/Libraries
- TensorFlow, Keras, Matlab, Microsoft SQL Server

Operating Systems
- MS Windows, Macintosh

CAREER PROFILE

Research Career Profile

Research Intern: HALLIBURTON — June 2017 - **August 2017** (3 months)
- Oil well location optimization under geomechanical constraints for maximum flow of hydrocarbons

Research Assistant: Computational Physiology Lab — July 2016 - **present** (31 months)
- Data Analysis and Curation, Design Improvement of Experiment, Facial Action Coding System, Signal processing, for various projects

Research Intern: People Strategist — May 2014 - Aug 2014 (4 months)
- Web indexing potential clients for the company by using web crawlers. I was part of the data scraping and analytics team. I developed an automatic work-flow to meet the business needs for filtering out non relevant clients and select clients which needs services provided by People Strategist. This project required immense domain knowledge, programming skills for creating web crawling applications.

Teaching Career Profile

Teaching Assistant, University of Houston Aug 2016 - **present** (30 months)

- Conducted 3 hours of lab sessions each week, including teaching and grading of homework and assignments.
  - Software Engineering, COSC 4351
  - Data Structures and Algorithms, COSC 3320
  - Software Design, COSC 4353

Teaching Assistant: St. John's College and St. George's College

- Managed student correspondence and conducted tutoring sessions for course students
  - Basics of circular and rotational motions. Workshop held by Dr. H.C Verma, IIT-Kanpur, Spring 2010
  - Game Theory, Fall 2013

RECENT/CURRENT PROJECTS

[1] Toyota Safety Research Project - Simulator 2 – *Texas Institute for Measurement, Evaluation and Statistics*

[2] Dexterity Surgical Study – *Houston Methodist Hospital*

[3] – *Halliburton*

[4] Writing Poetry through RNN Implementation. *UH Coursework.*

[5] Interpolating derivatives and gradients of a 2D function to 3D. *Numerical Analysis*

[6] Math Learning Disabilities among Young Adults in College: Structure, Identification, and Validation. *NSF - CPL*

[7] Managing Stress in the Workplace: Unobtrusive Monitoring and Adaptive Interventions.

[8] Stress Study under Academic Deadline. *NSF - CPL NSF - CPL*

PUBLICATIONS

[1] Absence of Stressful Conditions Accelerates Dexterous Skill Acquisition in Surgery, *Nature - 2019*

[2] Email Makes You Sweat: Examining Email Interruptions and Stress with Thermal Imaging, *CHI - 2019*