SURAJ PAWAR

4505 Duval St, Austin, TX-78751
646-346-0584 | suraj.bpgc@gmail.com | surajrpawar.github.io

EDUCATION

PhD, Mechanical Engineering Expected 2023
The University of Texas at Austin

Master of Science, Mechanical Engineering, GPA 4.0/4.0 May 2019
The University of Texas at Austin

Bachelor of Engineering (Honors), Mechanical Engineering, GPA 8.12/10 August 2013
Birla Institute of Technology and Science, Pilani

ACADEMIC EXPERIENCE

Graduate Research Assistant, The University of Texas at Austin August 2018 - Present

- Currently researching on physiological parameter estimation and control of Left Ventricular Assist Devices
- Masters Thesis 'Recursive Estimation of Systemic Vascular Resistance Using Measurements From a Left Ventricular Assist Device'

Teaching Assistant, The University of Texas at Austin September 2017 - December 2018

- Served as Teaching Assistant for Dynamic Systems and Controls Lab
- Conducted hands on lab experiments for senior undergraduate students on topics of Data Acquisition, LabVIEW, Dynamics and Controls

INDUSTRIAL EXPERIENCE

Medical Device R&D Intern, Windmill Cardiovascular Systems Inc 06/2019 - 08/2019

- Built hardware in the loop systems for testing a Left Ventricular Assist Device
- Developed LabVIEW based modular software architecture for distributed real-time control & monitoring of test stations
- Developed PID controller for tracking reference pressure signals and rejecting disturbances

Test Engineering Intern, Bose Corporation 05/2018 - 08/2018

- Planned and executed end of life upgrade of an automated system for functional testing
- Developed prototype low cost Bluetooth test solution that reduced component costs by 93 %
- Developed software for automated conversion of production data sets from an older format to a newer format

Applications Engineer, National Instruments 09/2015 - 07/2017

- Supported Motion Control and Machine Vision applications for key academic and research accounts
- Built a proof of concept on Active Vibration Control of a cantilever beam using real-time data acquisition and control for National Instrument's annual technical conference
- Delivered presentations in national conferences on data acquisition and control using graphical system design

Engineering Leadership Program, National Instruments 07/2013 - 09/2014

- Increased customer success through world class phone and email support for LabVIEW, data acquisition and automated test applications

- Trained customers across India on LabVIEW, data acquisition, real-time control and monitoring and automated testing

PUBLICATIONS

E. S. Rapp, **Pawar, Suraj R**, J. R. Gohean, E. R. Larson, R. W. Smalling, and R. G. Longoria, "Evaluating a hardware-in-the-loop system intended for testing ventricular-assist device control and sensing algorithms," *American Controls Conference*, 2020 (accepted)

E. S. Rapp, **Pawar, Suraj R**, J. R. Gohean, E. R. Larson, R. W. Smalling, and R. G. Longoria, "Estimation of systemic vascular resistance using built-in sensing from an implanted left ventricular assist device," *Journal of Engineering and Science in Medical Diagnostics and Therapy*, vol. 2, no. 4, 2019

SKILLS AND CERTIFICATIONS

Programming	C/C++ (limited), MATLAB, NI TestStand, NI LabVIEW
Mechanical Design	PTC Creo, CATIA, AutoCAD
Others	Git, Technical Presentations and working in a team
Certifications	Certified Associate LabVIEW Developer