

# SURAJ PAWAR

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## EDUCATION

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| <b>PhD, Mechanical Engineering</b><br>The University of Texas at Austin  | Expected 2023 |
| <b>Master of Science, Mechanical Engineering</b> , GPA 4.0/4.0<br>The University of Texas at Austin                            | May 2019      |
| <b>Bachelor of Science (Honors), Mechanical Engineering</b> , GPA 8.12/10<br>Birla Institute of Technology and Science, Pilani | August 2013   |

## INDUSTRIAL EXPERIENCE

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| <b>Medical Device R&amp;D Intern, Windmill Cardiovascular Systems Inc</b>  | 06/2019 - 08/2019 |
| <ul style="list-style-type: none"><li>• Built hardware in the loop systems for testing a Left Ventricular Assist Device</li><li>• Developed LabVIEW based modular software architecture for distributed real-time control &amp; monitoring of test stations</li><li>• Developed PID controller for tracking reference pressure signals and rejecting disturbances</li></ul>  |                   |
| <b>Test Engineering Intern, Bose Corporation</b>   | 05/2018 - 08/2018 |
| <ul style="list-style-type: none"><li>• Planned and executed end of life upgrade of an automated system for functional testing</li><li>• Developed prototype low cost Bluetooth test solution that reduced component costs by 93 %</li><li>• Developed software for automated conversion of production data sets from an older format to a newer format</li></ul>  |                   |
| <b>Applications Engineer, National Instruments</b>   | 09/2015 - 07/2017 |
| <ul style="list-style-type: none"><li>• Supported Motion Control and Machine Vision applications for key academic and research accounts</li><li>• 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</li><li>• Delivered presentations in national conferences on data acquisition and control using graphical system design</li></ul> |                   |
| <b>Engineering Leadership Program, National Instruments</b>  | 07/2013 - 09/2014 |
| <ul style="list-style-type: none"><li>• Increased customer success through world class phone and email support for LabVIEW, data acquisition and automated test applications</li><li>• Trained customers across India on LabVIEW, data acquisition, real-time control and monitoring and automated testing</li></ul>   |                   |

## ACADEMIC EXPERIENCE

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| <b>Graduate Research Assistant, The University of Texas at Austin</b>  | 08/2018 - Present |
| <ul style="list-style-type: none"><li>• Masters Thesis 'Recursive Estimation of Systemic Vascular Resistance Using Measurements From a Left Ventricular Assist Device'</li></ul>                                 |                   |
| <b>Teaching Assistant, The University of Texas at Austin</b>   | 09/2017 - 12/2018 |
| <ul style="list-style-type: none"><li>• Served as Teaching Assistant for Dynamic Systems and Controls Lab</li><li>• Conducted lab experiments on topics of system modeling, identification and control</li></ul> |                   |

## PUBLICATIONS

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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

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)

## SKILLS

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<b>Programming</b>	C, MATLAB, NI TestStand, NI LabVIEW
<b>Mechanical Design</b>	PTC Creo, CATIA, AutoCAD
<b>Others</b>	Excellent team skills, Ability to deliver technical presentations

## CERTIFICATIONS

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Certified LabVIEW Associate Developer

2015