

Mishal Assif P K | Resume

CSL 164, 1308 W Main St – Urbana, IL 61801

📧 [mishalassif.github.io](https://github.com/mishalassif)

✉ mishal2@illinois.edu

EDUCATION

University of Illinois Urbana-Champaign

Ph.D in Electrical Engineering

CPI: 4.00/4.00

Urbana-Champaign, USA

Present

Indian Institute of Technology Bombay

B.Tech + M.Tech in Mechanical Engineering

CPI: 8.63/10.00

Bombay, India

August 2019

PUBLICATIONS

Scenario approach for minmax optimization in the nonconvex setting: positive results and caveats

M. Assif P K, D. Chatterjee, R. Banavar

2019

To Appear in SIAM Journal on Optimization. [\[arXiv preprint\]](#)

Measure of quality of finite-dimensional linear systems: A frame-theoretic view

M. Assif P K, M. R. Sheriff, D. Chatterjee

2019

Submitted. [\[arXiv preprint\]](#)

A simple proof of the discrete time geometric Pontryagin maximum principle

M. Assif P K, D. Chatterjee, R. Banavar

2018

To Appear in Automatica. [\[arXiv preprint\]](#)

Variational collision avoidance on Riemannian manifolds

M. Assif, R. Banavar, A. M. Bloch, M. Camarinha, L. Colombo

2017

Proceedings of the IEEE Conference on Decision and Control, 2018. [\[arXiv preprint\]](#)

TEACHING EXPERIENCE

Differential Geometric Methods in Control

Teaching Assistant

Spring 2018

Microprocessors and Automatic Control

Teaching Assistant

Fall 2018

Microprocessors and Automatic Control Lab

Teaching Assistant

Spring 2019

PRESENTATIONS AND TALKS

12th International ICMAT Summer School on Geometry, Mechanics and Control

Universidade de Santiago de Compostela, Spain.

July 2018

Short talk on "Geometric Pontryagin Maximum Principle for discrete time optimal control problems."

TECHNICAL EXPERIENCE

Autonomous Underwater Vehicle Team (AUV-IITB)

Software developer, Controls subsystem

2015 - 2016

Secured second place at the International AUVSI Robosub competition 2016.