SCHOLARS
MHI 2018-19 PhD SCHOLARS

Each year, a select group of PhD students from the ECE Department are chosen as Ming Hsieh Institute Scholars. These students are carefully reviewed by a faculty committee on the basis of their research accomplishments and desire for an academic career. They assist MHI in carrying out its mission.

Jian Li
Advisor: Richard Leahy

Sepideh Hassan Moghaddam
Advisor: Mihailo Jovanovic

Debarghya Sarkar
Advisor: Rehan Kapadia

Ramy Tadros
Advisor: Peter Beemer

Qian Yu
Advisor: Salman Avestimehr

Ming Hsieh Institute
intelligent technologies to empower mankind

It takes more than just technical skill to be a holistically successful graduate student. That was the guiding principle for this year’s MHI Ph.D. Scholar cohort when developing their public program: Enhance-Cultivate-Excel. They decided to focus on personal and career development strategies for their peers. A series of 2-hour interactive seminars were organized:

Effective Public Speaking led by R. Steven Johnson
Self-management, Decision Making, and Leadership by Dr. Christopher Bresnahan
Faculty Positions Application and Selection Process by Dr. Gupta and Dr. Hashemi
Research & Industry Grant Proposal by Dr. Jovanovic, Dr. Mitra, and Dr. Nayak

RACE ON COMPETITION
The competition was split in two races, progress check (non-mandatory) and final (mandatory). The progress check race was organized halfway through the competition. In total, 15 teams completed the progress check race, whereas the other teams could not attend due to mid-terms which were held around the same time.

On April 12, the day of the final race, 26 teams were ready to compete. The teams registered lap times ranging from 13.7 seconds to 39 seconds, although not every team succeeded in completing a lap without crossing the track boundaries. The top three teams were:

Shanlin Sun, Hang Du, Peize Feng - 13.7 second lap time.
Shatad Kolin Purohit, Pramod Chandra Samudrala, Bharath Chintamani - 14.9 second lap time.
Justin Ly, Edison Siu - 19.4 second best lap time.

The Race On Competition will continue in Fall of 2019.

MING HSIIEH INSTITUTE
The Ming Hsieh Institute (MHI) is focused on enhancing academic and research programs within the Ming Hsieh Department of Electrical and Computer Engineering. Through supporting innovative activities and hosting leading researchers from around the globe, MHI helps position the department at the forefront of emerging fields within electrical and computer engineering.

MHI Expenses

<table>
<thead>
<tr>
<th>Category</th>
<th>Expenses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operations</td>
<td>51%</td>
</tr>
<tr>
<td>Seminars, Workshops, and Visitors</td>
<td>27%</td>
</tr>
<tr>
<td>Annual Department Events</td>
<td>13%</td>
</tr>
<tr>
<td>Scholar Program</td>
<td>5%</td>
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<tr>
<td>MHI Space</td>
<td>4%</td>
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</tbody>
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MHI Leadership
Shri Narayanan, Director
Hossein Hashemi, Co-Director
Bhaskar Krishnamachari, Co-Director
Cathy Huang, Business Officer
Benjamin Paul, Communications Manager

2018-2019 Faculty Advisory Council
Salman Avestimehr
Rehan Kapadia
Mahta Moghaddam
Krishna Nayak
Antonio Ortega
Mike Chen
Mihailo Jovanovic

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ANNUAL REPORT
2018/2019
MHI Industry Research and Technology Seminar
Developed in the Fall of 2016, this series focuses on inviting speakers from industry to share their technical expertise. Speakers and ECE students exchange ideas and brainstorm solutions. Industry speakers in 2018-19 included representatives from Savant Company Inc., Microsoft Research, Visualization and Interaction Research Group at Microsoft, and Alibaba Cloud.

MHI Center for Cyber-Physical Systems & IoT Joint Seminar Series
The second edition of the Cyber-Physical Systems Seminar Series was especially active this year. Visitors from industry and leading universities participated in the Spring as part of class EE 598. Even more talks will be scheduled for Fall of 2019.

2018-19 Number of speakers: 30
2018-19 Budget: $10,000

MHI Center for Systems and Control-CommNetS Seminar Series
This series is a weekly seminar that brings together faculty and students in communications, networks and controls. One of the primary goals of the series is to expose students to the work taking place in other areas of engineering.

2018-19 Number of speakers: 26
2018-19 Budget: $15,000

MHI Computer Engineering Research Seminar Series
This series offers an interdisciplinary perspective on the cutting-edge research and development in the field of computer engineering. Computer engineering deals with the design, development, testing, and evaluation of computer components, systems, and networks.

2018-19 Number of speakers: 6
2018-19 Budget: $5,000 (with $5,000 from 2017-2018)

MHI Integrated Systems Seminar Series
This series hosts researchers to cover topics related to integrated circuits, systems, and related devices in the context of diverse applications including communication, computation, networking, sensing and imaging. Speakers from academia and industry covered topics related to brain-inspired integrated circuits for computation and communications, silicon integrated circuits, and high-speed integrated transceivers.

2018-19 Number of speakers: 11
2018-19 Budget: $10,000

MHI Medical Imaging Seminar Series
This series features lecturers from leading universities and medical institutions in the US and abroad on all topics related to the various aspects of medical imaging.

2018-19 Number of speakers: 3
2018-19 Budget: $10,000

MHI Nano Materials and Devices Seminar Series
This series aims to expose students to cutting-edge research in the field of nanotechnology. In 2018-19, leaders in academia and industrial research institutes shared their most recent achievement in the diverse field of nanoscale materials, devices and systems.

2018-19 Number of speakers: 11
2018-19 Budget: $10,000