JUNIOR RESEARCHERS IN MULTIDISCIPLINARY FIELD

FACULTY OF ENGINEERING
MSA UNIVERSITY

MSA
UNIVERSITY
IN EGYPT SINCE 1996
Established by Dr.Nawal El Degwi
MSA UNIVERSITY
جامعة أكتوبر للعلوم الحديثة والآداب

"Research is to see what everybody else has seen, and to think what nobody else has thought." – Albert Szent-Györgyi

"A discovery is said to be an accident meeting a prepared mind.." – Albert Szent-Györgyi

"Let the future tell the truth, and evaluate each one according to his work and accomplishments. The present is theirs; the future, for which I have really worked, is mine." – Nikola Tesla

"Of all things, I liked books best." – Nikola Tesla

"Errors are not in the art but in the artificers." – Isaac Newton

"To every action there is always opposed an equal reaction." – Isaac Newton

"The highest form of pure thought is in mathematics." – Plato

"Science is nothing but perception." – Plato

"Imagination is more important than knowledge." – Einstien

Outstanding Hub

Table of contents :

Overview of the activity

"Research is to see what everybody else has seen, and think what nobody has thought"   --Szent-Györgyi

It's of no doubt that we here, at the outstanding hub (OH) and MSA are keen to provide the rigors, reliable and well-founded base for scientific research. It's a pleasure to announce the commencement of such steps. Backed by the Quality Assurance Unit and the Outstanding Committee, the outstanding hub aims to deliver and establish its two core aspects:

1. Scientific Research; planning and executing :

Though the title is self-explanatory, it's essential to dissect its connotation; since its establishment the hub has housed three published papers in both abstract and applied fields, with one vison, of expanding its reach to multidisciplinary fields. Through professional and supervisory oversight qualified students just like you, can or will, publish their well-chosen papers. Worry not, as planning is not left aside. Those who are willing to take such a courageous step towards serving science, but fear they lack the needed aspects, are going to aided by researchers and professors, to insure a maximized return of comprehension and a satisfying end-quality result.
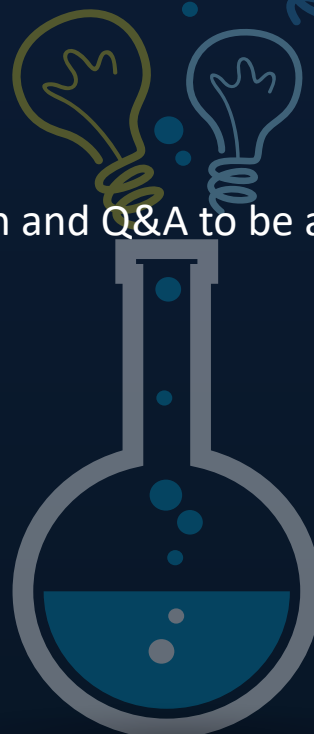
2. Science Simplified

When things get too technical, it sometimes sounds gibberish. Our second main goal is to cherish the idea of providing a base understanding to science withier basic or advanced without sounding gibberish to those who wants to take a glimpse of how interesting and fascinating it is. Our presenters, values the same concept, thus, enabling them such an ease way of delivering such a concept or a content, ensuring the satisfaction of three different audiences type; the stranger, the learner and the expert. Ensuring that there is always something to be amazed and interested about. If you have such a concept/content why not reach out? Better, why not present it yourself. We are all ears!

Sessions date for introduction and Q&A to be announced soon.

Can't wait to see you!

All the best,

[OH Initiators]

Outstanding Hub Initiators

Assoc.Prof. **Ghada Abdelhady**
**Head of
Outstanding Hub**

Prof. **Maysa Omar**
**Head of
Outstanding & Creative Students
Committe**

Ahmed Ibrahim
**Moderator of
Outstanding Hub**
**MSAian 3rd Year
ECE**

Ahmed Zaki
**MSAian 4th Year
ASE**

Mahmoud Ahmed
**MSAian 3rd Year
CS**

Youssef Hany
**MSAian 3rd Year
ECE**

Mahmoud Tarek
**MSAian 3rd Year
ECE**

Getting Started
Initiators & Biographies

🔻Youssef Elhabashy *(20 Years)*

Youssef is an ECE student at MSA university who believes that a person's worth is measured in how much is given. For this, he is in a constant effort to better himself following the path that he has chosen; academics. Thereafter, he published his first academic research paper as of his second year of university, to be followed by a second one soon after. Youssef has been in the top of his class since his freshman year. For his distinction, he was asked to undergo assisting L1 students. He was also appointed a moderator of academics in the Astronomy club MSA. Youssef has shown great adequacy in functional, developmental and structural programming; in which his interests lie, along with applied sciences. Youssef is keen —as aforementioned— to give, spread and facilitate knowledge to fulfil his beliefs.

🔻Ahmed Ibrahim *(20 Years)*

"If you can't explain it simply, then you don't understand it well enough"

Einstein

Having that quote said by one of the greatest minds to ever walk the earth, not only did it enlighten him, but forged a path, where it made him dedicated to learn, explore and share. Picking up on subjects as behavior analysis and psychoanalysis at 13 followed by Mathematics, classical and quantum Physics.

He became astonished by science and those who lay their career to it. He published his first paper during his sophomore year in Engineering, MSA university to be only followed by another two publications soon after in various fields including; IoT, Machine Learning and Deep Learning along with a mathematical representation to their implementations. He resides with honors in his class and has undergone some academic and non-academic positions, assisting L1 students formally and heading the academics and the presidency in the Astronomy club respectively. His current interests lie in pure mathematics, mathematical physics and quantum mechanics and how they interact. Ahmed believes knowledge is a path, once taken, is only fair to give back.

Ahmed Zaki *(22 Years)*

THE SECRET OF GETTING AHEAD IS GETTING STARTED

"Architecture begins where engineering ends" Walter Gropius

That is our belief, the architecture is the product of using imagination and art under the umbrella of technology and theories. Ahmed always aims to be an integrated architect, working in different fields to gain and experience to build his own Definition of architecture and life. Ahmed has participated in international and local competitions in architectural design and he has won local and international awards and certifications.

He has participated in competitions in the UAE, France, Italy and USA. Ahmed got his first international award when he achieved an honorable mention award in Rifat Chadirji prize 2019 with his team in tamayouz excellence award in designing a museum of Barjeel's art in sharjah, UAE. Ahmed always seek to apply what he believes and that has been achieved when he published his 1st paper when he was in the 3rd year of his architecture study at MSA university and visualize it as 3d active render.

He loves futuristic architecture and He dreams to work with mega studios to be an architectural designer in science fiction and predicting the future movies.

Mahmoud Tarek *(20 Years)*

Mahmoud is an Electrical communication and electronic systems engineering student, who believes that science and knowledge have to be shared, applying the prophet Mohamed's words:

"The best of you is he who learns the science and teaches it".

He has perseverance and patience enough to achieve his targets. He has the talent in graphics and using minimal resources to establish a project. He is working on improving this talent by theories and scientific research. Recently he has been certified by Huawei as an information and communication technology AI associate (HCIA-AI) ,also he has been certified by IBM as an artificial intelligence analyst and has achieved the second stage of COVID-19 virtual hackathon. Mahmoud is currently working on achieving Huawei professional certificate in AI .

Mahmoud Ahmed *(20 Years)*

Mahmoud believes that learning is a process that never ends, with experience and knowledge to be acquired along the way. He has held various titles regarding his field of expertise; programming and web-designing. He was and still the youngest in his level to achieve such mastery. He participated in couple of hackathons in which, he and his team were placed in top tiers. Mahmoud's ideology in learning can be put plainly in two words; captivating and capturing.

Learning is captivate in the sense, that it sets new challenges and milestones to be achieved, always trying to make one's potential flourish, and capturing in where, it paves the way for acquiring knowledge, experience, and a whole new mindset for exploring, solving and applying acquired knowledge. Mahmoud is interested -- and currently working towards-- Machine learning, AI, and their applications.

Become a member

Establishing a community that encourages students to partici-pate in extracurricular   activities where they can display their work and teach others their skills. Beside that they participate in research papers under supervision of their professors in MSA.

The interested Students should meet the following criteria:

- Be a sophomore at least.
- Preferred to have a CGPA of at least 3.60 .
- Have good English language skills and communication and interper-sonal skills.
- Provide a transcript of his/her subjects to review what subjects they are academically capable of.
- Decent in using Microsoft Office.
- Clear communication skills, flexible and abide by deadlines.

Positions, Job Description and Eligibility criteria

MSA is keen on providing quality content and environment for both parties; the attendees and the participants. Henceforth, it is crucial to abide by certain standards in the outstanding hub. Worry not, there is a room for tolerance, if one seems to have slightly fallen off the criteria in place, proper methods will be included to balance the scale.

THE MORE YOU LEARN, THE MORE YOU EARN

Researcher :

Researchers are responsible for collecting, organizing, and analyzing opinions and data to solve problems, explore issues, and predict trends. They may specialize in different areas. Professionals working on the social sector study the public´s opinion about services, parties, social issues, political campaigns, personalities, etc. Specialists dedicated to the marketing sector are required to design and administer surveys to study what people are most likely to purchase, etc.

They will be required to undergo the following:

Administering surveys

Creating reports

Reviewing other studies

Analyzing data

Overseeing particular projects

Minimum required criteria:

1.Has done/participated in research, academic projects or similar.

2.A reader, with critical thinking and judgment.

3.Fluent in English (Writing; verbal is a bonus).

4.Decent in using Microsoft office

5.Clear communication skills, flexible and abide by deadlines.

Presenter :

Individuals interested in presenting a topic in any scientific area should contact the head of the Outstanding Hub and conduct an interview with the committee of the outstanding hub. Once a presenter is confirmed, the presenter will be responsible for the following:

1. Presenters should plan, research and write their own scripts and send them to the head of the outstanding hub one week ahead before the session date to be reviewed.
2. Presenters act as the host or co-host, present the topic and interact with the audience.
3. Presenters should deliver the information to the audience in a scientific style appropriate to the academic rules.
4. Presenters should follow the research ethics.

Minimum required criteria:

1. Confident and steady in delivering ideas.

2. Shows decent explanatory skills.

3. Capable of presenting materials outside his/her field.

4. Fluent in English (Writing; verbal is a bonus).

5. Decent in using Microsoft office.

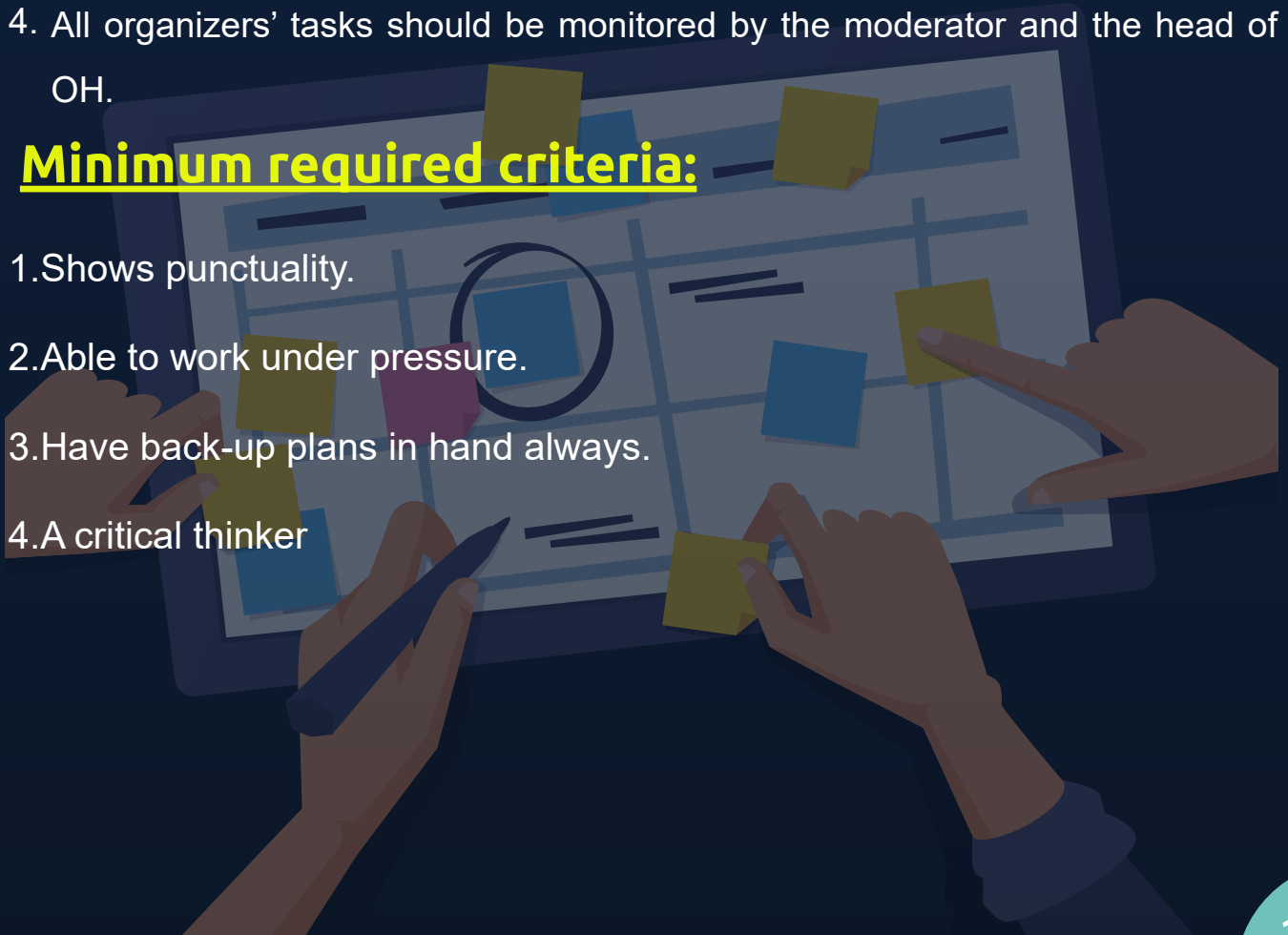6. Clear communication skills, flexible and abide by deadlines.

Session Organizer :

Individuals interested in organizing a technical session should contact the moderator or the head of the Outstanding Hub. Once an organizer is confirmed, organizer will be responsible for the following:

1. Ensuring that presenters meet the deadlines of submitting the description and presentation of the session and keep the moderator updated.
2. Organizers should ensure that the session description is clear and accurate in time scheduling
3. Organizers are responsible for OH pages on Facebook and Tweeter. They will post the reviewed announcements by the moderator. (The coming sessions schedule, date and time and brief about the session).
4. All organizers' tasks should be monitored by the moderator and the head of OH.

Minimum required criteria:

1. Shows punctuality.

2. Able to work under pressure.

3. Have back-up plans in hand always.

4. A critical thinker

Graphic Designer :

Graphic designers create visual ideas, using computer software, to inspire and captivate the audience. They create flyers, announcements, and logos.

Minimum required criteria:

1. Shows punctuality.

2. Able to work under pressure.

3. Decent in designing and providing graphical solutions

Who we are

The outstanding hub was built around three students —ECE and ASE majors— in their sophomore year, who published their first research paper about smart cities to be accepted in the MSA conference 2019. This achievement is the first activity registered for the outstanding hub.

Providing the presented talented MSAians, the outstanding hub will pioneer such a field in its creativity and members' inclusion; with their ability to harness, professionalize and utilize their flair by introducing and writing compelling topics, articles and papers to serve as an essence to an equitable scientific research.

We seek to establish a community that encourages students from different faculties to participate in research activities under the supervision of their professors at MSA where they can display their work and share their knowledge with others.

Take Part!

If you are interested, please, fill in the following form by no later than 14th October 2020:

Form : https://forms.gle/RUxQbrUY1FYUuEAk9

Inquires?

For any inquiries contact Ahmed Ibrahim at

Email: ahmed.ibrahim22@msa.edu.eg