

# ➡ Applicant Application Review

Full Name: Haitham Elhussieny Abdulaziz Hussien

## 👤 Personal Informations

<b>Name:</b>	Haitham Elhussieny Abdulaziz Hussien
<b>Gender :</b>	1
<b>Nationality :</b>	Egypt
<b>Date of Birth :</b>	1984-09-07
<b>Country :</b>	Egypt
<b>City :</b>	New Borg El-Arab City
<b>Address :</b>	49, Alhai Althaleth, New Borg Elarab City
<b>ID Type :</b>	28409078800071
<b>Marital status :</b>	Finished
<b>Mobile Number :</b>	01066433640
<b>Home Number :</b>	034594981
<b>Email :</b>	haitham.elhussieny@ejust.edu.eg

## 👤 Education Information

<b>Academic Degree :</b>	PhD in Mechatronics and Robotics Engineering
<b>Academic Study :</b>	Egypt-Japan University of Science and Technology (E-JUST)
<b>Academic Grade :</b>	CGPA: 3.78
<b>Data Gained :</b>	2016-09-01
<b>From :</b>	2013-09-01
<b>To :</b>	2016-09-01
<b>Academic Degree :</b>	Master of Science in Mechatronics and Robotics Engineering
<b>Academic Study :</b>	Egypt-Japan University of Science and Technology (E-JUST)
<b>Academic Grade :</b>	CGPA: 3.5
<b>Data Gained :</b>	2016-09-01
<b>From :</b>	2011-09-01
<b>To :</b>	2013-09-01
<b>Academic Degree :</b>	B.Sc. of Electronics Engineering
<b>Academic Study :</b>	Faculty of Engineering (Shoubra), Benha University
<b>Academic Grade :</b>	84%
<b>Data Gained :</b>	2007-07-01
<b>From :</b>	2002-09-01

**To :**

2007-07-01

## Careers[0] Information

**Emp Name** The University of Salford

:

**Emp** Greater Manchester, UK

**Address :**

**Emp Title :** Senior Research Fellow in Soft Robotics

**Emp Description** - Carry out high quality scientific research inline with the requirements of current funded projects; - Design, implement, test and document appropriate robot designs and control systems; - Liaise with other researchers, both internally and at partner institution to achieve project deliverables; - Contribute to general scholarly activities such as promoting good practice to PhD students and other researchers; - Liaise regularly with the principal investigator and report on progress towards research objectives; - Disseminate research outcomes in collaboration with the principal investigator at conferences, exhibitions and in academic journals; - Develop and maintain skills in relevant research methodologies;

**From :** 2019-08-12

**To :** 2020-08-12

**Emp Name:** Egypt-Japan University of Science and Technology (E-JUST)

**Emp** P.O. Box 179, New Borg El-Arab City Postal Code 21934, Alexandria, Egypt

**Address :**

**Emp Title :** Adjunct Assistant Professor

**Emp Description** - Teaching a postgraduate course for one day per week - Co-supervision of master and doctoral students.

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**From :** 2018-09-01

**To :** 2019-09-01

**Emp Name**

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**Emp**

**Address :**

**Emp Title :**

**Emp**

**Description**

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**From :**

**To :**

## III Qualifications & Training

**Diploma :** Embedded Systems Diploma

**Study :** Jelecom Co., Egypt

**Grade :** Very good

**Course :** Coursera and LinkedIn online courses with certificates (Attached in the CV)

**Conent :****Organizing Body :** Coursera**Data Gained :** 2005-05-01**Data Attend :** 2020-07-23**Diploma :****Study :****Grade :****Course :****Conent :****Organizing Body :****Data Gained :****Data Attend :**

## Otherqualification[0]

**Research Fellowships :** 1. May, 2017 – Jun, 2018 Postdoctoral Researcher KOREATECH Univ., S. Korea: • Worked as a contributor in a collaboration project with CHARM Lab., Stanford University with title "Human-Centered Design and Control of Vine Robots for Disaster Scenarios"; Key achievement: Publication on Vine-robots in IEEE Robotics and Automation Magazine. 2. Aug, 2019 – ongoing Senior Research Fellow in Soft Robotics University of Salford, UK • Carry out high quality scientific research. • Design, implement, test and document appropriate robot designs and control systems. • Liaise with other researchers, both internally and at partner institution, to achieve project deliverables. Key achievement: Establishment of a link between the Robotic center at the University of Salford and the NHS Royal Salford Trust group to work on assistive robotic glove for patients with neurological motor diseases. One book chapter submitted (abstract accepted).

**Scientific Committees :** Lecturer at the faculty of engineering (Shoubra), Benha University

- list of Publications :**
1. Journals: • Ibrahim A. Seleem, H. El-Hussieny, Samy F. M. Assal and Hiroyuki Ishii, "Development and Stability Analysis of an Imitation Learning-based Pose Planning Approach for Multi-section Continuum Robot." IEEE Access (2020). • Ibrahim A. Seleem, Samy F. M. Assal, Hiroyuki Ishii and H. El-Hussieny, "Demonstration-Guided Pose Planning and Tracking for Multi-section Continuum Robots Considering Robot Dynamics." IEEE Access (2019). • Margaret M. Coad, Laura H. Blumenschein, Sadie Cutler, Javier A. R. Zepeda, Nicholas D. Naclerio, H. El-Hussieny, Usman Mehmood, Jee-Hwan Ryu, Elliot W. Hawkes, and Allison M. Okamura. "Vine Robots: Design, Teleoperation, and Deployment for Navigation and Exploration." IEEE Robotics & Automation Magazine (2019). • H. El-Hussieny and Jee-Hwan Ryu, "Inverse Discounted-based LQR Algorithm for Learning Human Movement Behaviors." Applied Intelligence, 2018, 49 (4), pp.1489-1501. • H. El-Hussieny, Samy F. M. Assal and Jee-Hwan Ryu, "SoTCM: a scene-oriented task complexity metric for gaze-supported teleoperation tasks." Intelligent Service Robotics, 11, 2018, pp.279-288. • H. El-Hussieny, A.A. Abouelsoud, Samy F. M. Assal and Said M. Megahed, "Adaptive learning of human motor behaviors: An evolving inverse optimal control approach." Engineering Applications of Artificial Intelligence, 50, 2016, pp.115-124.
  - H. El-Hussieny, Samy F. M. Assal, and M. Abdellatif, "Robotic Exploration- New Heuristic Backtracking Algorithm, Performance Evaluation and Complexity Metric", International Journal of Advanced Robotic Systems, 12, 2015, pp.33.
  2. Conferences • M. E. Shalabi, H. El-Hussieny, A. A. Abouelsoud, and Ahmed M. R. Fath Elbab, "Control of Automotive Air-Spring Suspension System Using Z-Number Based Fuzzy System" in the International Conference on Robotics and Biomimetics, Automation and Robotics (ROBIO 2019), pp. 1306-1311, IEEE, 2019. • Oladayo Solomon and H. El-Hussieny, "An ANFIS-based Human Activity Recognition using IMU sensor Fusion" in Proc. of IEEE Novel Intelligent and Leading Emerging Sciences Conference (NILE2019), Egypt, Vol. 1, pp. 34-37, IEEE, 2019. • Oladayo Solomon, Samy F. M. Assal and H. El-Hussieny, "Towards Development of an Autonomous Robotic System for Beard Shaving Assistance for Disabled People" in Proc. of IEEE International Conference on Systems, Man, and Cybernetics (SMC), Bari, Italy, pp. 3435-3440. IEEE, 2019. • H. El-Hussieny, Sang-Goo Jeong and Jee-Hwan Ryu, "Dynamic Modeling of A Class of Soft Growing Robots Using Euler-Lagrange Formalism" In 2019 SICE Annual Conference, Japan, pp. 453-458, IEEE (2019). • M. E. Shalabi, H. El-Hussieny, A. A. Abouelsoud, and Ahmed M. R. Fath Elbab, "Finite Control Augmented with Fuzzy Logic for Automotive Air-Spring Suspension System" in The 16th International Conference of Informatics in Control, Automation and Robotics (ICINCO 2019) [Accepted]. • Mohamed G. B. Atia, Omar Salah, and H. El-Hussieny, "OGPR: An Obstacle-Guided Path Refinement Approach for Mobile Robot Path Planning" in Proc. of the 2018 IEEE International Conference on Robotics and Biomimetics (ROBIO), 2018, pp. 844-849 • H. El-Hussieny, U. Mehmood, Z. Mehdi, S-G. Jeong, M. Usman, E. W. Hawkes, A. M. Okamura, and J.-H. Ryu, "Development and evaluation of an intuitive flexible interface for teleoperating soft growing robots" in IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS), 2018, pp. 4995-5002. • Ibrahim A. Seleem, H. El-Hussieny and Samy F. M. Assal, "Motion Planning for Continuum Robots: A Learning from Demonstration Approach" 2018 27th IEEE International Symposium on Robot and Human Interactive Communication (RO-MAN), Nanjing, China, 2018, pp. 868-873. • Ibrahim A. Seleem, H. El-Hussieny and Samy F. M. Assal, "Development of a Demonstration-Guided Motion Planning for Multi-section Continuum Robots" in Proc. of IEEE International Conference on Systems, Man, and Cybernetics (SMC), Miyazaki, Japan, 2018, pp. 333-338. • H. El-Hussieny, A. Asker and O. Salah, "Learning the sit-to-stand human behavior: An inverse optimal control approach" 2017 13th International Computer Engineering Conference (ICENCO), Cairo, Egypt, 2017, pp. 112-117. • H. El-Hussieny, Samy F. M. Assal, A. A. Abouelsoud, Said M. Megahed, and T. Ogasawara, "Incremental Learning of Reach-to-Grasp Behavior: A PSO-based Inverse Optimal Control Approach," in Proc. of the 7th Int. Conf. on Soft computing and pattern recognition, Fukuoka, Japan, pp. 129-135, Nov. 13-15, 2015. • H. El-Hussieny, Samy F. M. Assal, A. A. Abouelsoud, and Said M. Megahed "A Novel Intention Prediction Strategy for a Shared Control Tele-manipulation System in Unknown Environments", in Proc. of the IEEE/IES Int. Conf. on Mechatronics (ICM 2015), Nagoya, Japan, pp. 204-209, 6-8 Mar. 2015. • H. El-Hussieny, S. F. M. Assal, and M. Abdellatif, "Improved backtracking algorithm for efficient sensor-based random tree exploration," in Proc. of the 5th Int. Conf. on Computational Intelligence, Communication Systems and Networks (CICSyN2013), pp 19-24, Madrid, Spain, 5-7 Jun. 2013. • H. El-Hussieny, S. F. M. Assal, and M. Abdellatif, "Improved sensor-based mobile robot exploration of novel environments", in Proc. of the 6th Int. Conf. on Intelligent Computing and Information Systems (ICICIS), 2013, pp. 43-49, Cairo, Egypt, 14-16 Dec. 2013.

<b>Conferences Attended :</b>	IROS&#039;18
<b>Patents :</b>	None
<b>Research Grants (Awarded As PI) :</b>	None
<b>Contributed As Co-Pi :</b>	(UNDER-REVIEW) STDF: Targeted Program Call 3/2019, Artificial Intelligence Title: Development of a hybrid parallel-deployable structure-based multi-gripper transplanting robot for row-by-row pot seedlings transplanting in field. PI: Prof Samy Assal (E-JUST)

**Supervision of Postgraduate Students :** Co-supervision/Advising: 1. E-JUST: 2018–2020 Demonstration-Guided Motion Planning for Continuum Robots PhD (Ibrahim Sleem) 2. E-JUST: 2018–2020 Intelligent Control of Automotive Air-Spring Suspension System. PhD. (Mohamed Essam) 3. E-JUST: 2019–2020 Autonomous Tasks-around-head Assistance for Elderly People. M.Sc. (Oladayo Solomon)

## References Employer

**Name :** Tsukasa Ogasawara

**Position :** Professor and Head of Robotics Lab., Nara Institute of Science and Technology, Nara, Japan

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