

ADRIAN SALAZAR

Email: adrianxsalazar@gmail.com **Google Scholar:** Adrian Salazar Gomez **Web:** <https://github.com/adrianxsalazar>
Phone: +44 7725 442175 **Linkedin:** <https://www.linkedin.com/in/adrianxsalazar>

RESEARCH INTEREST

I am interested in artificial intelligence and autonomous systems, especially in robot learning and decision making systems. I believe in robots as cautious continual learners. I aim to explore the links between continual learning and uncertainty in AI.

EDUCATION

- ◇ **King's College London, MSc Data Science (AI track)** *London, UK - September 2018-September 2019*
 - Distinction achieved. Overall Grade average = 82
 - **Key Modules:** Artificial Intelligence, Machine Learning, Pattern Recognition, Optimisation Methods, Data Mining.
- ◇ **University of Edinburgh, MSc Business Analytics (Optimisation track)** *Edinburgh, UK - September 2017-August 2018*
 - Distinction achieved. Overall Grade average = 73
 - **Key Modules:** Mathematical Programming, Simulation modelling and analysis, Data modelling, Game Theory.
- ◇ **University of West Florida & University of Burgos BSc in Statistics & Business** *Pensacola, USA & Burgos, Spain - August 2012-June 2016*
 - GPA: 3.86, Average: 8.1, Dean's list 2015, President's List 2016.
 - **Key modules:** Multivariate Methods in Data Analysis, Operations Management, Statistics, Mathematics.

RESEARCH EXPERIENCE

- ◇ **Research Assistant for project: 5G enabled AI for robotic applications** *Lincoln Centre for Autonomous Systems, University of Lincoln - January 2021 - Present*
 - Project supervised by Prof. Elizabeth Sklar and Prof. Simon Parsons.
 - Researching methods to improve performance and coordination of robotic learning systems through 5G connectivity.
- ◇ **Research Assistant in Machine Learning** *Lincoln Centre for Autonomous Systems, University of Lincoln - March 2020 - Present*
 - Project supervised by Dr. Petra Bosilj and Prof. Simon Parsons
 - Researching vision approaches to operate in occluded and item-dense environments.
- ◇ **Research Assistant in Robotic Perception** *Lincoln Centre for Autonomous Systems, University of Lincoln - March 2020 - September 2020*
 - Project supervised by Dr. Grzegorz Cielniak and Prof. Marc Hanheide
 - Investigated anomaly detection and out of distributions methods for visual assessments with autonomous systems.
- ◇ **Deep Learning Object Detector for Agricultural Robots** *King's College London - June 2019 - March 2020*
 - Research project supervised by Prof. Simon Parsons and Prof. Elizabeth Sklar.
 - Developed deep learning object detection methodologies for autonomous robots.
- ◇ **Master's research project: 3D Generative adversarial networks for augmentation of Human Motion datasets** *King's College London, January 2019 - October 2019*
 - Supervised by Dr. Brendan Michael. Research awarded with Distinction.
 - Developed Generative Adversarial Networks to generate artificial 3D data. Augmented data of 3D image classifiers.
- ◇ **Explainable Artificial Intelligence Literature Review** *King's College London, November 2018 - March 2019*
 - Supervised by Dr. Sanjay Modgil, awarded with Distinction. Wrote a literature review of Explainable AI methods.
- ◇ **Master's research project: Machine learning on graphs** *University of Edinburgh, January 2018 - August 2018*
 - Supervised by Prof. Jamal Ouenniche and Dr. Johannes De Smedt. Awarded with Distinction.
 - Feature extraction from customer-product-customer graphs and prediction of behaviours in e-commerce.

PUBLICATIONS

- **Deep Regression versus Detection for Counting in Robotic Phenotyping.** Adrian Salazar Gomez, Simon Parsons, Erchan Aptoula, Petra Bosilj. In IEEE Robotics and Automation Letters (Accepted. To be published).

- **Toward robot co-labourers for intelligent farming.** Zhuoling Huang, Genki Miyauchi, Adrian Salazar Gomez, Richie Bird, Amar Singh Kalsi, Chipp Jansen, Zeyang Liu, Simon Parsons, and Elizabeth Sklar. In Companion of the 2020 ACM/IEEE International Conference on Human-Robot Interaction, 2020 .
- **Understanding human responses to errors in a collaborative human-robot selective harvesting task.** Zhuoling Huang, Adrian Salazar Gomez, Richie Bird, Amar Singh Kalsi, Chipp Jansen, Zeyang Liu, Genki Miyauchi, Simon Parsons, and Elizabeth Sklar. In Proceeding of EPSRC UK-RAS, UKRAS20 Conference: “Robots into the real world”.
- **An experiment on human-robot interaction in a simulated agricultural task.** Zhuoling Huang, Genki Miyauchi, Adrian Salazar Gomez, Richie Bird, Amar Singh Kalsi, Chipp Jansen, Zeyang Liu, Simon Parsons, and Elizabeth Sklar. In Proceedings of the 2020 Annual Conference Towards Autonomous Robotic Systems

TEACHING EXPERIENCE

- ◇ **Pattern Recognition and Machine Learning,** *King’s College London, 2020 and 2021 Spring term*
 - Last year undergraduate module. Teaching assistant for Prof. Simon Parsons and Dr. Helen Yannakoudakis.
- ◇ **Data Mining,** *King’s College London, 2020 Spring term*
 - Masters module. Teaching assistant for Prof. Elizabeth Sklar and Dr. Dimitios Letsios.
- ◇ **Artificial Intelligence,** *King’s College London, 2020 Autumn term*
 - Last year undergraduate module. Teaching assistant for Prof. Peter McBurney and Dr. Frederik Mallmann.
- ◇ **Machine Learning, Big Data, AI, and robotics,** *University of Lincoln, 2020 Autumn term*
 - Last year undergraduate module. Teaching assistant for Dr. Vassilis Cutsuridis.

PROFESSIONAL SERVICE

- **Reviewer:** 21st Towards Autonomous Robotic Systems Conference (TAROS 2020).
- **Conference volunteer:** Eighth International Conference on Learning Representations (ICLR 2020).
- **Conference volunteer:** Thirty-seventh International Conference on Machine Learning (ICML 2020).
- **Reviewer:** 12th International Conference on Social Robotics (ICSR 2020).
- **Program Chair:** 2nd Workshop of Quality of Interaction in Socially Assistive Robots (QISAR 2020) at 29th IEEE International Conference on Robot and Human Interactive Communication (RO-MAN 2020).
- **Conference volunteer:** Thirty-fourth Annual Conference on Neural Information Processing Systems (NeurIPS 2020).

EXPERIENCE IN INDUSTRY

- ◇ **Dixons Carphone, Data Scientist** *Edinburgh, UK - October 2017 - May 2018*
 - Applied machine learning to predict and understand trends and segment customers from text and click-stream data.
- ◇ **Voxbone, Marketing Analyst Intern** *Brussels, Belgium - October 2016 - March 2017*
 - Analysed datasets to support marketing department; cleaned datasets; query information from datasets.
- ◇ **Florida Small Business Development Center, Business consultant,** *Pensacola, USA - January 2016-May 2016*
 - Developed digital marketing solutions for local small businesses.
- ◇ **University of Burgos Student Union, President Student Council** *Burgos, Spain - September 2014 - August 2015*
 - Organised exam timetables; dealt with communications involving student complains; prepared business school events.

AWARDS

- ◇ **King’s Education Award 2020** *King’s College London, 2020*
 - Award to recognise teachers that supported students in and outside of the classroom.
- ◇ **Erasmus + grant** *Belgium, 2016*
 - European grant awarded on overall academic record to support cross country employment. *Value: €5000*
- ◇ **International Erasmus in USA scholarship** *Pensacola, USA 2014*
 - University of Burgos scholarship for outstanding student to study 1 year in a USA University. *Value: fees + €4000*

SKILLS

- ◇ **Programming Languages**
 - Python (used daily), MATLAB, C++, R, SQL.
- ◇ **Machine Learning Platforms & Tools**
 - Keras, Tensorflow, Pytorch, Scikit-learn, CUDA, Amazon Web Services, Google Cloud
- ◇ **Tools & Operative Systems**
 - Linux, ROS, Windows, Git, GitHub, L^AT_EX, Google Colaboratory, Unix Shell Scripting (bash)