

# José Alonso Solís-Lemus

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## Education

- 2015–Exp 2018 **Ph.D., Biomedical Engineering**, City, University of London, London.
- 2007–2013 **B.Sc., Applied Mathematics**, Instituto Tecnológico Autónomo de México (ITAM), Mexico City, Hons.
- 2003–2008 **B.Eng., Telematics Engineering**, Instituto Tecnológico Autónomo de México (ITAM), Mexico City, Hons.

## Publications

- 2017 **An objective comparison of cell-tracking algorithms**, Ulman, Maška, Magnusson, Ronneberger, Haubold, Harder, Matula, Matula, Svoboda, Radojevic, Smal, Rohr, Jaldén, Blau, Dzyubachyk, Lelieveldt, Xiao, Li, Cho, Dufour, Olivo-Marin, Reyes-Aldasoro, **Solís-Lemus**, ... and Ortiz-de-Solorzano, Nature Methods.

- 2017 **Segmentation and Shape Analysis of Macrophages using Anglegram Analysis**, **Solís-Lemus, JA**, Stramer, B, Slabaugh, G and Reyes-Aldasoro, CC, Journal of Imaging.

### Conference papers

- 2017 **Segmentation of Overlapping Macrophages Using Anglegram Analysis**, **Solís-Lemus, JA**, Stramer, B, Slabaugh, G and Reyes-Aldasoro, CC, Medical Image Understanding and Analysis, Edinburgh, Scotland, CCIS, Springer.
- 2015 **Microfluidic environment and tracking analysis for the observation of Artemia Franciscana**, **Solís-Lemus, JA**, Huang, Y, Wlodkowic, D, Reyes-Aldasoro, CC, British Machine Vision Conference, Swansea, Wales.

### Submitted

- 2017 **Shape Analysis and Tracking of Migrating Macrophages**, **Solís-Lemus, JA**, Stramer, B, Slabaugh, G and Reyes-Aldasoro, CC, IEEE Symposium on Biomedical Imaging, WA, US.

## Academic Activities

- 2018 - Present **Sessional Tutor**, *Foundation Mathematics / Statistics*, Kaplan International College London, Dr Radmila Topalovic.
- 2016 - Present **Graduate Teaching Assistant**, *Medical Imaging Modalities (BEng) / Medical Imaging (MEng)*, City, University of London, Dr Constantino Carlos Reyes-Aldasoro.
- 2016 - Present **Graduate Teaching Assistant**, *Biosignal and Image Processing (BEng)*, City, University of London, Dr Constantino Carlos Reyes-Aldasoro.
- 2014 **Visiting Lecturer in Mathematics**, *Introduction to Mathematics (BSc)*, ITAM.
- 2010/11 **Faculty assistant**, *Advise on mathematical subjects to all students on campus*, ITAM, Dr Cesar Luis García.

### Volunteer work

2010-2012 **High-school teacher for adults**, *Courses taught: Mathematics IV and V, Physics I and II*, ITAM, Mexico.

## Professional Experience

2014 **Software Developer**, *Developer specialising in Java and working on network monitoring*, Eficiencia Informativa (transl. *Information Efficiency*), Carlos Fuentes.

### Consulting

2014 **Research project assistant**, *Feasibility study for the Puebla ITS Technologies Project with the assessing of the deployment and integration of intelligent transportation system technologies into the Bus Rapid Transit System*, ITAM, Mexico, Dr Andre Possani Espinosa.

## Software development

2017 **Anglegram**, <https://github.com/alonsoJASL/matlab.anglegram>, MATLAB® package for shape analysis of binary images.

2015 **PhagoSight**, <https://github.com/phagosight/phagosight>, MATLAB® package for segmentation and tracking of fluorescent microscopy time-lapse sequences, Collaboration with CC Reyes-Aldasoro.

## Computer skills

Mathematics	Matlab
Programming	Java, C++, Python, Julia, bash
Statistics	R, SAS, SPSS
Microsoft	Office, Visual Basic

## Fellowships and Awards

2017	City Graduate School <b>Conference Travel Bursary</b>	<i>University of London</i>
2015	PhD Studentship	<i>SMCSE. City, University of London</i>
2014	Ex-ITAM Research Award in Technology and Engineering	<i>ITAM</i>
2012/13	Engineering Students Academic Excellence Award	<i>ITAM</i>

## Languages

Spanish	Native language
English	Proficient level: TOEFL iBT, 2014 (111/120); IELTS, 2014 (7.5/9)
German	Beginner level: A1 Start Deutsch 1 (2008)

## Referees

- **Dr Constantino Carlos Reyes-Aldasoro**, Senior Lecturer, School of Mathematics, Computer Science and Engineering. City, University of London. [reyes@city.ac.uk](mailto:reyes@city.ac.uk)
- **Dr Greg Slabaugh**, Senior Lecturer, School of Mathematics, Computer Science and Engineering. City, University of London. [gregory.slabaugh.1@city.ac.uk](mailto:gregory.slabaugh.1@city.ac.uk)
- **Dr Andre Possani**, Course Director of Mechatronics Engineering, Department of Digital Systems. ITAM. [possani@itam.mx](mailto:possani@itam.mx)
- **Dr César Luis García**, Course Director of Applied Mathematics, Department of Mathematics, Statistics. ITAM. [clgarcia@itam.mx](mailto:clgarcia@itam.mx)