

# José Alonso Solís-Lemus

+44 (0) 7838 189458  
alonso.jasl@gmail.com  
alonsojasl.github.io  
alonsosolislemus  
alonsoJASL

## 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, Bensch, Brox, Stegmaier, Mikut, Wolf, Hamprecht, Esteves, Quelhas, Demirel, Malmström, Jug, Tomancak, Meijering, Muñóz-Barrutia, Kozubek and Ortiz-de-Solorzano*, *Nature Methods*.

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

- 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

2015	PhD Studentship	SMCSE. City, University of London
2014	Ex-ITAM Research Award in Technology and Engineering	ITAM
2012/13	Engineering Students Academic Excellence Award	ITAM

---

## Languages

Spanish Native language  
English Proficient level: TOEFL iBT (2014), IELTS (2014)  
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
- **Dr Greg Slabaugh**, Senior Lecturer, School of Mathematics, Computer Science and Engineering. City, University of London. gregory.slabaugh.1@city.ac.uk
- **Dr Andre Possani**, Course Director of Mechatronics Engineering, Department of Digital Systems. ITAM. possani@itam.mx
- **Dr César Luis García**, Course Director of Applied Mathematics, Department of Mathematics, Statistics. ITAM. clgarcia@itam.mx