

# johnaslanides

Machine Learning



## contact

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## links

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🔗 [www.aslanides.io](http://www.aslanides.io)

## technical

Machine learning  
Artificial intelligence  
Software engineering  
Applied mathematics

## programming

Python • Julia  
C • Go • Java  
MATLab •  $\text{\LaTeX}$   
*Mathematica*  
JavaScript  
Excel/VBA

## conferences

CFAR (Berkeley, 2016)  
ACML (ANU, 2013)  
AIP (UNSW, 2012)

## languages

English (native)  
French (semi-fluent)  
Spanish (basic)

## education

- 2015 - 2016 **MSc • Computer Science (Hons)** The Australian National University  
First Class Honours and the University Medal • 7.0/7.0 GPA  
Specialization: Artificial Intelligence  
Thesis: [AIXIjs: A Software Demo for General Reinforcement Learning](#)  
Advisors: Dr. [Jan Leike](#) & Professor [Marcus Hutter](#)
- 2008 - 2012 **BSc • Physics (Hons)** The Australian National University  
First Class Honours • 6.2/7.0 GPA  
Specialization: Theoretical Physics  
Thesis: [Relativity Concept Inventory](#)  
Advisor: Professor [Craig Savage](#)
- 2011 **Associate in Music, Australia (AMusA)** Australian Music Examinations Board  
Award with Distinction • Piano Performance  
Diploma awarded by examination to outstanding candidates in the fields of musical performance and music theory.
- 2006 - 2007 **High School Certificate** Canberra Grammar School  
1<sup>st</sup> in physics & french, and top overall science student • 99.25 ATAR  
Extension 2 Mathematics, Physics, Chemistry, English, Extension French

## experience

- 2017 - **Machine Learning Consultant** Self-employed  
Machine learning R&D for a telematics tech startup in Sydney.  
Technologies include GIS, time series clustering, and deep learning.
- 2015 - 2016 **Software Engineer** [Karma Wiki](#)  
Spent 9 months doing web development for a [social network startup](#) based in Canberra. Implemented numerous features, including draft and notification systems. Supervisor: [Dayne Rathbone](#)  
Software Stack: Go • Cassandra • Git • JIRA
- 2014 - 2015 **Software Consultant** Stygron Systems  
Spent 4 months as a software developer & consultant to ACT Health. Designed and implemented systems for use in operating theatres and labs in the Canberra Hospital, and maintained existing medical supply chain systems. Supervisor: [Mervyn Rose](#)  
Software Stack: Centura • Microsoft SQL Server
- 2013 - 2014 **Graduate Researcher** NICTA & The Australian National University  
Spent 18 months as a PhD researcher in physics. Developed my interests in statistics and machine learning, and developed my programming skills on two projects:
- Novel signal processing techniques for the Laser Interferometer Gravitational Wave Observatory (LIGO) project. • Advisor: [Dr. Ra Inta](#)
  - Structured prediction with conditional random fields • Advisor: [Dr. Justin Domke](#)

|             |   |                                    |
|-------------|---|------------------------------------|
| 2013        | <b>Teaching Assistant</b>   | The Australian National University |
|             | Ran tutorials & office hours. Graded assignments & papers, and wrote model solutions. 4.5/5.0 average score in student feedback:  |                                    |
|             | <ul style="list-style-type: none"> <li>• <a href="#">PHYS1201 (Advanced Physics II)</a> - electromagnetism, waves &amp; optics, and special relativity • Supervisor: Professor Craig Savage.</li> <li>• <a href="#">PHYS3001 (Theoretical Physics I)</a> - variational calculus, quantum mechanics, electromagnetism &amp; relativistic field theory. • Supervisor: Professor <a href="#">Joe Hope</a></li> </ul> |                                    |
| 2008 - 2012 | <b>Private Tutor</b>  | Self-employed                      |
|             | Taught mathematics physics, and piano to high school students from Year 8 - Year 12.  |                                    |
| 2011        | <b>Medical Receptionist</b>   | Kambah Village Medical Practice    |
|             | Patient admin and service at a high-volume GP clinic.   |                                    |

## awards

|      |  |  |
|------|--|--|
| 2016 | <b>University Medal</b>  | The Australian National University (ANU) |
|      | The University Medal recognises students who have obtained First Class Honours (or Masters Advanced Equivalent) and demonstrated exceptional academic excellence across their studies. |  |
| 2014 | <b>Top-up Scholarship</b>  | National ICT Australia (NICTA)           |
|      | Scholarship for graduate researchers. (\$10,000/year)  |  |
| 2013 | <b>Australian Postgraduate Award</b>   | Commonwealth Government                  |
|      | Scholarship for graduate researchers. (\$25,000/year)  |  |
| 2012 | <b>John Carver Honours Scholarship</b>   | ANU                                      |
|      | Scholarship for physics Honours students. (\$2,500/year)   |  |
| 2008 | <b>College of Business &amp; Economics Undergraduate Award</b>   | ANU                                      |
|      | Scholarship for outstanding first-year economics students. (\$5,000)   |  |
| 2007 | <b>Premier's Award</b>   | NSW Government                           |
|      | Prize awarded to students who achieve results of over 90 in 10 units of study in the HSC.  |  |

## publications

|      |   |                                |
|------|---|--------------------------------|
| 2013 | <b>The Relativity Concept Inventory</b>                             | Physical Review Special Topics |
|      | J. S. Aslanides & C. M. Savage                                      |                                |
|      | Phys Rev Special Topics: Physics Education Research Vol. 9, Issue 1 |                                |
| 2017 | <b>General reinforcement learning: survey &amp; experiments</b>     | (under preparation)            |
|      | J. S. Aslanides, J. Leike, and M. Hutter                            |                                |