

# Joshua Jordan

Software Engineer

## Contact

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## Languages

C++, Python, C, C#,  
Java

## Tools

OpenCV, Docker, Git,  
ZMQ, Darknet,  
Tensorflow, openVino,  
Numpy, matplotlib

## Platforms

Linux, Windows, Nvidia  
Tx2, Raspberry Pi, Keil

*I make solutions using software, sensors and machine learning. I excel in a team environment, solving challenging problems in creative ways.*

## Experience

- Excellent development ability in C, C++, C# and Python
- Proven track record of developing cutting-edge tech
- Responsible for system design of computer vision products
- Extensive experience with subversion, debugging tools and best practices
- Wide range of sensor integration for microcontrollers
- Intuitive end-to-end UI and UX design
- Excellent written and verbal communication skills
- Thrive within a creative team environment
- Constantly looking to learn and improve
- Experienced in start-up culture

## Employment

- 2017–2019 **IMAGR - Mechatronics/Software Engineer** [www.imagr.co/](http://www.imagr.co/)  
Responsible for designing a world-class computer vision solution for retail. Saw our product go from early prototype to winning a contract with an international company and customer roll out. Real time classification of >10,000 objects.
- Rapid prototyping computer vision solutions
  - Designed an electro-mechanical autonomous data collection platform
  - Real-time deep learning classification on an embedded device
  - "Big data" pipelines using zmq
  - Deep dive into camera systems
  - Helped set up the software team - hiring, testing and best practices
  - Liaison with investors, contractors and customers
- 2013–2017 **Seequent (formaly AranzGeo) - Software Engineer** [www.seequent.com/](http://www.seequent.com/)  
Geological modelling startup producing best in class software in conjunction with a diverse team. Responsible for critical features in the product.
- Implementation of complex mathematical code within a python/c codebase for windows
  - Fast, responsive and intuitive application with large datasets
  - Bug tracking, licensing and automated tests for desktop application
- 2012–2013 **Trimble Navigation - Software Engineer** [www.trimble.com/survey/](http://www.trimble.com/survey/)  
Developed innovative surveying products in a mature codebase to produce a wide range of geospatial data.
- Research and prototyping of real time HUD devices as an independent initiative
  - GPS and UX work in C and C++ for Windows CE devices
  - Developed an external API for third parties
- 2011–2012 **HITLab NZ - Researcher** [www.hitlabnz.org/](http://www.hitlabnz.org/)  
UX Research scholarship using a haptic device for molecular bonding problems.
- OpenGL and OpenCV development

## Education

2007–2011	<b>Bachelor of Engineering (Hons), Mechatronics</b> 2:1 Distinction	University of Canterbury, Christchurch
2007	<b>NCEA level 3</b> 1 <sup>st</sup> in English NCEA level 3 (final year) Distinction in Drama NCEA level 3 (final year) STAR University maths program	Nayland College, Nelson
<i>Awards</i>		
2011	<b>ENZCon published paper</b> Parallelism of an MCU on an FPGA	Massey University, Palmerston North
2007	<b>McKee Trust Scholarship</b> Three year high achievement scholarship	University of Canterbury, Christchurch

## Interests

2017–	<b>Hijinxx</b> Part of a community group running stages at various festivals in NZ. This involved Dj-ing, lighting setup and event management.
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### *Professional*

Machine learning, game theory, artificial intelligence, embodied cognition, topology, computer vision, systems design, climate change.

### *Personal*

Surfing, DJ'ing, kite-surfing, football, sailing, guitar, skiing.

*References available on request.*