

# Joshua Jordan

BEng (hons) Mechatronics/Software Engineer

## Contact

+44 7379 433247  
joshuansjordan@gmail.com

## Git

broccoli-smuggler

## Languages

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

## Tools

OpenCV, Docker, Git,  
ZMQ, Darknet,  
Tensorflow, openVino,  
Numpy, matplotlib, I2C,  
SPI

## Platforms

Linux, Windows, Nvidia  
Tx2, Raspberry Pi, Keil,  
stm32

*I make meaningful solutions using software, machine learning and creativity. I'm passionate about working with great people to solve challenging problems that make a difference.*

## Experience

- Excellent development ability in C++, Python and C
- Proven track record of independently completing cutting-edge technology projects
- System design of machine learning products
- Version control, debugging tools, effective testing and coding standards
- Large scientific codebases, greenfield projects and real-time low latency systems
- Microservices using react, docker and zmq
- Developed successful relationship with clients and investors
- Excellent written and verbal communication skills
- Constantly looking to learn and improve

## Employment

- 2017–2019 **IMAGR - Mechatronics Engineer** [www.imagr.co/](http://www.imagr.co/)  
Key member in incubating a world-class computer vision solution for retail. Helped our product go from early prototype to winning a contract with an international company and customer roll out. Real time detection and classification of >10,000 unique products.
- Rapid prototyping computer vision solutions
  - Electro-mechanical autonomous microservice data collection platform
  - Real-time deep learning on an embedded device
  - Deep dive into vision systems
  - Key lead in the software team - set priorities, hiring, mentoring
  - Client service and 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 scientific 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    **Bachelor of Engineering (Honors), Mechatronics**    University of Canterbury, Christchurch  
2:1 Distinction  
Class representative - events organisation, liaison for peers

## Achievements

2011    **ENZCon published paper**    Massey University, Palmerston North  
Parallelism of an MCU on an FPGA

2007    **McKee Trust Scholarship**    University of Canterbury, Christchurch  
Three year high achievement scholarship

## Volunteering

2017–    **Event manager and artist**    Hijinx  
Part of a community group running stages at various festivals in NZ. This involves Dj-ing, lighting setup and building artwork to engage and delight.

2015–    **Start-up consultant**    EasyLink  
Technical consultant for feasibility of a passenger wheelchair system. Wrote all the software, including computer vision and controls, to get prototype ready for investor pitches.

## Interests

### *Professional*

Artificial intelligence, UX, GAN's for nlp, embodied cognition, topology, computer vision, systems design.

### *Personal*

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

*Written references available on request.*