# RENATO F. SALAS-MORENO, PhD

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#### **OVERVIEW**

Renato is an innovative leader with a unique talent to attract and inspire world-class team members towards solving challenging problems in real-time computer vision as the foundation for truly unique products.

At his first venture: Surreal Vision Ltd, he invited renowned scientists from Imperial College London to help transition a novel robotics mapping technology that would prove useful in Virtual Reality as demonstrated by their Facebook acquisition. Similarly, at Vtrus Inc, he put together a talented scientific team from Georgia Tech to solve autonomous indoor drone navigation and raised millions of dollars in funding. Most recently at Formavision, he's leading a Generative AI team towards predicting 3D body shape from single camera input for natural communication in the Metaverse.

He has a rare blend of deep technical understanding of AI, the vision to foresee disruptive technological waves and the courage for taking the first steps towards building cutting-edge products from the ground up. Furthermore, he maintains strong academic connections by attending scientific conferences and staying on top of impactful publications.

### **AWARDS**

2015 MIT Innovator under 35. Article link.

Innovate UK, Entertainment on the Move Innovation Contest 2014. Winner of a government grant to help bootstrap Surreal Vision Ltd which was acquired soon afterwards by Facebook.

MSc with Distinction. 2nd prize for best image processing MSc project "Real-time facial features detection and tracking".

### **EDUCATION**

PhD in Robotic Vision. Imperial College London, United Kingdom. Oct 2010 - Sep 2014. Researched methods for Simultaneous Localization and Mapping (SLAM) for robotics navigation using RGB-D sensors and higher-level object features.

MSc in Advanced Computing. University of Bristol, United Kingdom. Sep 2005 - Oct 2006. Computer Vision and Graphics studies.

BSc in Systems Engineering. National University of Engineering, Lima - Peru. Mar 1999 - Dec 2004. Core engineering and computer science degree.

#### **PUBLICATIONS**

ElasticFusion: Dense SLAM Without A Pose Graph. Thomas Whelan, Stefan Leutenegger, Renato Salas-Moreno, Ben Glocker and Andrew Davison. RSS 2015. <u>PDF</u>, <u>Video</u>.

Dense Semantic SLAM. Renato Salas-Moreno. PhD Thesis, Imperial College London, October 2014. PDF.

Dense Planar SLAM. Renato Salas-Moreno, Ben Glocker, Paul Kelly and Andrew Davison. ISMAR 2014. PDF, Video.

SLAM++: Simultaneous Localisation and Mapping at the Level of Objects. Renato Salas-Moreno, Richard Newcombe, Hauke Strasdat, Paul Kelly and Andrew Davison. CVPR 2013. PDF, Video.

### **EMPLOYMENT**

Formavision Inc (Formerly Omnivor Inc), Seattle WA, USA. VP of Engineering. May 2021 - Present. Leading a Generative AI framework to estimate a full 3D human body shape from a single camera input in real-time using adversarial networks.

Vtrus Inc, Seattle WA, USA. CEO and Co-Founder. Feb 2017 - Apr 2021. Built the robotics startup from the ground up, producing an autonomous indoor drone and robotics perception platform, including technical architecture, recruiting, team coordination, as well as key business activities.

Facebook - Oculus VR, Redmond WA, USA. Research Scientist. May 2015 - Jan 2017. Research and development of real time indoor mapping for virtual reality headsets.

Surreal Vision Ltd (acquired by Facebook), London, UK. CEO and Co-Founder. Nov 2013 - Apr 2015. Built the 3D mapping startup from scratch including initial team building, finding first customer, planning and orchestrating software development and negotiating the acquisition with Facebook.

AMD, Austin TX, USA. Software Engineer Internship. Jun 2011 - Oct 2011. Characterisation of workloads for unified CPU/GPU architectures.

Activision - Bizarre Creations Studio, Liverpool, UK. Jun 2008 - Oct 2010. Software Engineer. Development of 3D Modelling and Animation tools for video games.

### **ENTREPRENEURSHIP**

Investor at the SeaChange angel group in Seattle WA and providing strategic guidance to Pacific Northwest startups.

Experienced securing government grants and raising funds from VCs with a successful exit to Facebook.

## **IN THE PRESS**

Facebook buys British virtual reality start-up Surreal Vision. The Telegraph, 28 May 2015. Article link.

Researchers use Oculus Rift and Augmented Reality to put Facebook on your wall. Gizmodo, 17 September 2014. Article link.

The Oculus Rift can now change your carpeting. Fast Company, 16 September 2014. Article link.

Computers are gaining the ability to remember what things look like. Digital Trends, 6 June 2013. <u>Article link</u>.

Remembering objects lets computers learn like a child. New Scientist, issue 2920, 5 June 2013. <u>Article link</u>.

### **LANGUAGES**

English: Proficient. Spanish: Native language.

### **CITIZENSHIP**

**US** Citizen

#### OTHER INTERESTS

Passionate aviator since childhood.

Hold a Private Pilot license with Instrument Rating and high performance endorsement for a Cirrus SR22 aircraft.

Member of the Civil Air Patrol - Seattle Squadron and the Experimental Aircraft Association (EAA).

Actively building a Velocity Aircraft kit with friends in a hangar at Boeing Field in Seattle.

Frequent visitor at Aerospace expos such as Oshkosh and SunNFun.