

Eagle Jones

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(310) 403-7525

Education

University of California, Los Angeles, CA

Ph.D., Computer Science with Computer Vision focus (June 2009)

Thesis: "Large Scale Visual Navigation and Community Map Building"

Teaching Assistant, CS 174 – Computer Graphics (Spring 2004)

Research Assistant, Computer Vision Lab (2003-2009)

Research Assistant, Laboratory of Neural Imaging (2002-2003)

California Institute of Technology, Pasadena, CA

B.S., Engineering & Applied Science with Computer Science focus (June 2001)

Teaching Assistant, CS 1/2 – Programming in C/C++ (Winter-Fall 1998)

Skills

Pioneer in visual-inertial sensor fusion / SLAM and autonomous driving. Expert in machine learning; computer vision and graphics; robot navigation; image, video, and audio compression; C, C++, Java, Python, and various assembly languages; software performance analysis and tuning. Excellent analytic, interpersonal, and communication skills. Experienced team leader, corporate strategist, and problem solver. Extensive public speaking in academic/scientific, policy, and philosophical settings. Entrepreneur; founder or early employee at six startups, including highly successful acquisition as Founder/CEO.

Experience

Senior Principal Engineer

Intel, Santa Clara, CA (Sept 2015-Feb 2019)

Integrated RealityCap team and technology with Intel RealSense group. Hired and directly managed team of up to 15 senior engineers and scientists. Provided technical leadership across group and to other Intel divisions. Led development of inside-out head tracking solution for Project Alloy all-in-one VR device (demonstrated during Intel CEO keynote at CES). Developed original concept for and executed to shipment of Intel RealSense Tracking Camera T265, based on original RealityCap technology. Member of technical due diligence team for Movidius and other acquisitions.

Founder and CEO

RealityCap, San Francisco, CA (Aug 2012-Sept 2015)

Technical and business lead for company selling a 3D sensing platform on mobile devices. Recruited and managed team of five. Developed partnerships and negotiated contracts. Drove technical vision and implementation. Raised angel investment. Grew revenue to \$1M run rate. Successfully acquired by Intel.

Engagement Manager

Quid, San Francisco, CA (June 2011-Aug 2012)

Built client engagement team and methodology for data analytics startup. Final responsibility for all client deliverables; managed 8 direct reports and 2-3 simultaneous client engagements. Directed engineering efforts to replicate and scale client service success in a SaaS model. Jointly responsible for several million dollars in revenue from clients including Intel, Microsoft, Samsung, Visa, BBVA, Sberbank, and the DOD.

Senior Associate

McKinsey & Company, Seattle, WA (June 2009-June 2011)

Consultant to top management at several premier institutions including eight of the Fortune 500. Experience in strategy, operations, and marketing & sales across several industries, including telecommunications, consumer electronics, and semiconductors. Pro bono work at two non-profits to evaluate and launch new initiatives. "Your leadership, energy, and brainpower are humbling. Honored to have you on the team." -Vice President, Fortune 50 client.

Project Manager

Golem Group, Santa Monica, CA (2004-2005)

Key member of team which built two robotic trucks, qualifying for and placing well in both the 2004 and 2005 DARPA Grand Challenge off-road autonomous vehicle races. Described as "the little engine that could" by DARPA Director

Tony Tether. Contributed to sensor and control software, overall system design, testing, and hands-on engineering. Interfaced with sponsors, media, and handled aspects of legal/administrative affairs.

Fellow **Entrepreneurial Fellowship Program, Pasadena, CA (2001-2002)**

Selected to participate in Caltech/Art Center College of Design/NSF program. Classroom time, mentoring, and hands-on experience in start-up, design, marketing, branding, legal issues, intellectual property, financing, etc.

Technical Director and Co-Founder **Aneiva, Inc., Ashland, OR (1995-1999)**

One of two programmers for Cydonia (aka Lightbringer), hailed by Computer Gaming World magazine as "...the strongest-looking sci-fi adventure in years." [May 1998] Researched and implemented custom video compression for streaming video. Created image-based rendering technology capable of 360° panoramic viewing.

Programmer **Starseed, Inc., Ashland, OR (1997-1999)**

Researched/implemented wavelet image compression for internet accelerator product. Company acquired by Yahoo!.

Programmer **Vocal Point, Inc., San Francisco, CA (Summer 1998)**

Evaluated performance of speech recognition software and designed voice-enabled web browser for startup.

Assistant Computer Architect **Intel, Hillsboro, OR, (Summer 1995)**

Worked on the then-prototype P6 (Pentium Pro) processor. Independently discovered critical unexpected performance issues of memory addressing scheme, resulting in pre-production fixes. Wrote assembly code to maximize speed of block memory operations, substantially improving performance and influencing future compiler designs.

Research Assistant **Southern Oregon University, Ashland, OR (Summer 1994)**

Built neural network to predict particle storms which destroy satellites. Applied chaotic model to magnetosphere.

Awards

McKinsey Insight Program (2007)
Semifinalist, TopCoder Open Marathon Competition (2007)
Finalist, DARPA Grand Challenge (2004, 2005)
Green Hills Software Scholarship (1998)
Caltech Upperclass Merit Award (1998)
Caltech Freshman Merit Award (1997)
Rensselaer Medal for Math and Science (1996)
Autodesk Scholar of Distinction (1996)
National Merit Scholar – 1600 SAT (1995)

Professional Activities and Service

Program Committees

IEEE Conference on Computer Vision and Pattern Recognition (2006, 2007)
IEEE International Conference on Computer Vision (2007)

Volunteer Work

2nd Lieutenant, Civil Air Patrol

Personal Achievements

Completed Ironman Arizona - 2.4 mile swim, 112 mile bike, 26.2 mile run (2005)
NCAA Water Polo All-American (2000)
Caltech swimming record holder - 1650, 1000, and 500 yard freestyle (2000-2018)
Private Pilot License
NAUI SCUBA Certified - Advanced Open Water

Publications

Patents

- [1] E. Jones. Three-dimensional scanning using existing sensors on portable electronic devices. (US Patent #8976172), 2015.
- [2] E. Jones, B. Hirashima, and J. Miller. Enabling use of three-dimensional locations of features with two-dimensional images. (US Patent #9519973), 2016.

Refereed Journal Articles

- [3] E. Jones and S. Soatto. Visual-inertial navigation, mapping and localization: A scalable real-time causal approach. *International Journal of Robotics Research*, 30:407–430, 2011.
- [4] R. Mason, J. Radford, D. Kumar, R. Walters, B. Fulkerson, E. Jones, D. Caldwell, J. Meltzer, Y. Alon, A. Shashua, H. Hattori, N. Takeda, E. Frazzoli, and S. Soatto. The Golem Group / UCLA autonomous ground vehicle in the DARPA Grand Challenge. *Journal of Field Robotics*, 23:527–553, 2006.
- [5] A. MacKenzie-Graham, E. Jones, D. Shattuck, I. Dinov, M. Bota, and A. Toga. The informatics of a C57BL/6J mouse brain atlas. *Neuroinformatics*, 1(4):397–410, 2003.

Proceedings of Refereed International Conferences

- [6] E. Jones, A. Vedaldi, and S. Soatto. Inertial structure from motion with autocalibration. In *Proc. ICCV Wkshp. on Dyn. Vision*, 2007.
- [7] E. Jones, B. Fulkerson, E. Frazzoli, D. Kumar, R. Walters, J. Radford, and R. Mason. Autonomous off-road driving in the DARPA Grand Challenge. In *Proc. IEEE/ION Pos., Loc., and Nav. Symp.*, 2006.
- [8] E. Jones and S. Soatto. Layered active appearance models. In *Proc. Int. Conf. on Comp. Vision*, 2005.
- [9] G. Doretto, E. Jones, and S. Soatto. Spatially homogeneous dynamic textures. In *Eur. Conf. Comp. Vis.*, 2004.
- [10] A. MacKenzie-Graham, M. Martin, E. Jones, D. Shattuck, R. Jacobs, R. Voskuhl, and A. Toga. Atlas of experimental autoimmune encephalomyelitis in the C57BL/6 brain. In *Int. Mtg. of Soc. for Neuroscience*, 2003.

Book Chapters

- [11] E. Jones. Writing documentation. Designing the user interface. In *More Tricks of Game Prog. Gurus*. Sams, 1995.