

Education

Ph.D., Computational Fluid Dynamics, 1985
University of Strathclyde
Glasgow, Scotland
Dissertation: *An active motion compensation system using multiple bodies*, Advisor: C. Kuo

B.Sc. with Hons, Naval Architecture, 1978
University of Strathclyde
Glasgow, Scotland

Stanford Executive Program, 1999
Stanford University
Stanford, California

Professional Experience	2014 - Pres	Founder and President (501c6 Non Profit) OpenCommons, Portland OR
	2015 - Pres	Founder and CEO urban.systems Inc.
	2019 - Pres	UK Honorary Consulate to Oregon British Consulate
	2015 - Pres	Research Professor, Computer Science Portland State University, Portland OR
	2013 - 2015	Director, Research and Advanced Technology Development Intel Federal, Hillsboro, OR
	2004 – 2013	Adjunct Professor, School of Business Portland State University, Portland, OR
	2010 – 2013	Director, Government Research and Academic Programs Intel Corporation, Hillsboro, OR
	2008 – 2013	Director, Extreme Scale Programs Intel Labs, Hillsboro, OR
	2006 – 2008	GM Integrated Analytic Solutions New Business Initiatives, Intel Corporation, Hillsboro, OR
	2004 – 2006	Director of Strategy, Intel Architecture Group Intel Corporation, Hillsboro, OR
	1999 – 2004	Technology Director, Microprocessor and Systems Research Intel Corporation, Hillsboro, OR
	1997 – 1999	Technical Assistant, VP Desktop Products Group Intel Corporation, Hillsboro, OR
	1995 – 1997	Business Director, Internet and Communications Group Intel Corporation, Hillsboro, OR
	1992 – 1995	Director of Marketing and Application Development Supercomputer Systems Division, Intel, Beaverton, OR
	1991 – 1992	Vice President Product Development Meiko World Inc., Boston, MA
	1987 – 1991	General Manager Meiko Scientific, Arlington, VA
	1986 – 1987	Senior Naval Architect M. Rosenblatt and Son, Crystal City, VA
	1985 – 1986	North Sea Lecturer Glasgow University, Glasgow, Scotland
	1982 – 1985	Research Program Lead University of Strathclyde, Glasgow, Scotland
	1980 – 1982	Senior Naval Architect J Ray McDermott, New Orleans, Louisiana
	1978 – 1980	Naval Architect J Ray McDermott, London, England

Board and Advisory Roles	2019 – Pres.	Member of the Board Technology Association of Oregon Foundation, Portland OR
	2016 – Pres.	Chair, Transportation Technology Working Group NIST Global Community Technology Challenge
	2010 – 2019.	Member of the Board of Trustees and Chair (2016-2018) Oregon College of Art and Craft (OCAC), Portland OR
	2006 – 2016.	Member of the Board of Advisors Collaborative Software Initiative, Portland, OR
	2004 – 2016.	Member of the board of advisors NSF Science & Technology Center at OHSU/OGI Center for Coastal Margin Observation and Prediction (CMOP)
	2004 – 2016.	Member of the Technical Advisors Board PeoplePower, Redwood City, CA
	1999 - 2010	Member of the Board of Directors DCS Corporation, Alexandria, VA

Professional Society Roles	2016	Founding Member and Current Chair (2016 - Pres) (ACM) Emerging Interest Group on Smart Cities and Communities
	2011	Founding Member and First Advisory Board Chair (2011-2013) Association for Computing Machinery (ACM) SIGHPC
	2006	Member Association for Computing Machinery (ACM)
	1985	Professional Engineer Commonwealth of Virginia
	1985	Life Member Society of Naval Architects and Marine Engineers, New York NY
	1985	Member Institution of Structural Engineers, London UK
	1978	Life Member Royal Institution of Naval Architects, London UK
	1978	Chartered Engineer Engineering Council, UK

Research Interests	Technology Management <ul style="list-style-type: none">• Public, Private, Academic Partnerships
Computer and Computational Science <ul style="list-style-type: none">• Smart Cities and Communities• Internet of Things• Dynamic Runtimes for Parallel Computers• Intermediate Representations for Parallel Software• Domain Specific Languages• Scientific Programming Environments	
Computer Architecture <ul style="list-style-type: none">• Extreme Scale Systems• Dynamic Power Management• Over Provisioning and Locality Management	
Software Engineering <ul style="list-style-type: none">• Community structure and tools for rapid software development• Replication and Reproducibility	

External Research Funding	<ul style="list-style-type: none">• DARPA Ubiquitous High Performance Computing (UHPC): Intel and DARPA Collaborate on \$49M Research Effort in Extreme Computing, http://www.hpcwire.com/2010/08/10/darpa_sets_ubiquitous_hpc_program_in_motion/• DOE Advanced Scientific Computing Research (ASCR) XStack: http://science.energy.gov/ascr/research/computer-science/ascr-x-stack-portfolio• DOE Exascale Supercomputer Interconnect Design Forward: \$25.4 million in research and development contracts to five leading companies in high-performance computing (HPC) https://www.nersc.gov/news-publications/nersc-news/nersc-center-news/2013/department-of-energy-awards-25-4-million-in-contracts-for-extreme-scale-supercomputer-interconnect-design/• DOE Exascale Supercomputer Processor Design Fast Forward: Intel awarded \$19 million for both processor and memory technologies http://www.hpcwire.com/2012/07/12/doe_primes_pump_for_exascale_supercomputers/
Publications Video and Press	<ul style="list-style-type: none">• W. Pinfold, "Moderator: Electric - and Connected" <i>EV Roadmap 9</i>, Portland OR, July 20-21, 2015• S. Newberry, W. Pinfold, and M. Reich "Making Cities Smarter: A FutureTalk" <i>New Relic FutureTalks PDX</i>, May. 27th, 2015 https://youtu.be/aQl4Bwhhdcg• W. Pinfold, "Keynote Address – Global Cities Challenge" <i>Road to Smart Mobility Workshop</i>, Hillsboro, OR, April 22, 2015• N. Carter, et al. "Runnemed: An architecture for ubiquitous high-performance computing." <i>High Performance Computer Architecture (HPCA2013), 2013 IEEE 19th International Symposium 2013.</i> http://iacoma.cs.uiuc.edu/iacoma-papers/hpca13_1.pdf• W. Pinfold Video: "Interview" <i>ACM/IEEE SC2013 Conference on High Performance Networking and Computing</i>, November 17-22, 2013, Denver, CO, USA; Interview https://youtu.be/aDwqG3jHtiE• V. Sarkar, B. Chapman, W. Gropp, R. Knauerhase, T. Mattson, and W. Pinfold, "Open Community Runtime," https://01.org/projects/opencommunity-runtime.• S. Borkar, W. Pinfold "Simulation Technology Marketplace" <i>DOE PI Meeting: Technology Marketplace Sessions</i>, May 28-29, 2014 https://xstackwiki.modelado.org/May_28-29_Technology_Marketplace_Sessions• Inside HPC An Interview with Intel's Extreme Scale Computing Director, Wilf Pinfold, <i>Inside HPC</i>, January 13, 2012 http://insidehpc.com/2012/01/an-interview-with-intel-s-extreme-scale-computing-director-wilf-pinfold/• M. Kanellos "At Intel, the chip with two brains" <i>CNET</i>, August 20, 2012 http://www.cnet.com/news/at-intel-the-chip-with-two-brains/• W. Pinfold "On the challenges that face chip manufacturers who are working to improve the performance of computer chips" <i>Proceedings of The High Performance Computing Modernization Program Users Group Conference</i> June 20-23, 2011 Portland OR• Inside HPC "Green HPC Podcast Episode 1: Sifting Through The Hype", Inside HPC Podcast, January 2011 http://insidehpc.com/green-hpc-podcast-series/green-hpc-podcast-episode-1-sifting-through-the-hype/• BioIT World "Inside Intel's Interest in Sequencing", <i>BioIT World</i>, June 10, 2008 http://www.bio-itworld.com/issues/2008/june/intels-interest-in-sequencing.html• GenomeWeb "Intel Seeks Partners to Develop FPGA-Based Solution for Next-Gen Sequencing Analysis" May 2, 2008 https://www.genomeweb.com/informatics/intel-seeks-partners-develop-fpga-based-solution-next-gen-sequencing-analysis

- W. Pinfold Video: "Powerful Beyond Imagination" *Proceedings of the ACM/IEEE SC2006 Conference on High Performance Networking and Computing*, November 11-17, 2006, Tampa, FL, USA; https://youtu.be/OgxtE2_37Us
- J. Spooner "Intel looks to software to lift Itanium" *ZDNet*, April 26, 2001 <http://www.zdnet.com/article/intel-looks-to-software-to-lift-itanium/>
- A. Cataldo "Fiber weighed for chip interconnect" *EE Times*, October 12, 2001 http://www.eetimes.com/document.asp?doc_id=1204372
- W. Pinfold "Use of heterogeneous distributed memory parallel systems in image processing", *Proc. SPIE 1406, Image Understanding in the '90s: Building Systems that Work*, 132 (April 1, 1991); doi:10.1117/12.47976
- W. Pinfold "An active motion compensation system using multiple bodies" PhD Thesis 1985
- Quarterly reports for the UHPC, XStack, and Design Forward programs.

Courses Taught

- Innovation and Entrepreneurship
- Ocean and Aeronautical Structures
- Naval Architecture
- FORTH for programming control systems
- Prototyping with Arduino

Professional Service

Active in the SC Conference series sponsored by ACM SIGARCH, ACM SIGHPC, and IEEE Computer Society in the following roles
2014 – 2015 HPC Matters Chair
2012 Vice Chair
2011 MasterWorks Chair
2009 General Chair
2008 Deputy General Chair
2007 Technical Program Liaison to Communications
2006 Communications Chair
1995 Research Exhibits Chair
1994 Technical Papers Reviewer
1993 Technical Papers Reviewer

Products and Prototypes

Open Community Runtime: <https://01.org/projects/opencommunity-runtime>

FSIM: Traleika Glacier Architecture Simulator:
https://xstack.exascale-tech.com/wiki/index.php/Intel_FSim

OpenCV: http://www.eetimes.com/document.asp?doc_id=1182803

Margaret Foley "Home Control System Maupin Oregon: High Desert Drama" Oregon Home, January 10, 2012 <http://www.oregonhomemagazine.com/homes/860-high-desert-drama> this is a weekend home and it has microprocessor controlled hydronic heating and cooling system <http://www.wilfredpinfold.com/blog/>

We have done similar work on our Portland home <http://www.houzz.com/photos/18222419/Alhambra-Kitchen-mediterranean-kitchen-portland> which has connected lighting, door access and heating.

TAO Navy Tanker, <http://fas.org/man/dod-101/sys/ship/tao-204-rappahanock.jpg>

DDG51 Destroyer,
[https://en.wikipedia.org/wiki/USS_Arleigh_Burke#/media/File:USS_Arleigh_Burke_\(DDG_51\)_steams_through_the_Mediterranean_Sea.jpg](https://en.wikipedia.org/wiki/USS_Arleigh_Burke#/media/File:USS_Arleigh_Burke_(DDG_51)_steams_through_the_Mediterranean_Sea.jpg)

USS Corral Sea,
<http://www.google.com/imgres?imgurl=https://upload.wikimedia.org/wikipedia/>

Wilfred Pinfeld
President, OpenCommons

[commons/3/3f/CV-43_1981_DN-SC-93-00769.JPG&imgrefurl=https://en.wikipedia.org/wiki/USS_Coral_Sea_\(CV-43\)&h=2400&w=3004&tbnid=8G_17Pw_FajtFM:&tbnh=160&tbnw=200&usq=__pIMrqE2DQ8y4gWvWHQQhNi40h0E=&docid=7vhbUSXslmEHJM&itg=1](https://commons/3/3f/CV-43_1981_DN-SC-93-00769.JPG&imgrefurl=https://en.wikipedia.org/wiki/USS_Coral_Sea_(CV-43)&h=2400&w=3004&tbnid=8G_17Pw_FajtFM:&tbnh=160&tbnw=200&usq=__pIMrqE2DQ8y4gWvWHQQhNi40h0E=&docid=7vhbUSXslmEHJM&itg=1)

Installation of the first Mudslide Structure in the Gulf of Mexico.

Flare Tower on Shell Fulmar A

<https://www.flickr.com/photos/75103060@N00/8707174881>