Joe Sventek
Date: 27 February 2017
To: Office of the Governor, Executive Appointments
Subject: Statement of Interest for the Faculty Trustee position on the UO Board of Trustees

I am interested in being appointed to the Faculty Trustee position on the UO Board of Trustees when it becomes vacant on 1 July 2017. I have completed and attach the Interest Form; I also include my latest curriculum vitae (CV) and a biography of relevant milestones in my career.

As you will see from my bio and CV, I have held several leadership positions, both in industry and academia, throughout my career. I have managed sizeable budgets in different capacities, and have been a conscientious steward of those funds, both for my unit and for my employer.

More importantly, I have been entrusted with leadership of several interdisciplinary groups (and one inter-company group) exploring new strategic directions, again both in industry and academia. I have led such groups effectively, enabling each group member to communicate their opinions while continuing to steer the group to a successful conclusion. The recent specification, acquisition, and operationalization of the new high-performance computing facility at the UO is one of the most recent examples of such efforts. I have also successfully created a new company to produce products based upon research in my unit, thus creating jobs and tax revenue in the state of California. This startup company, TimesTen Performance Software, was acquired by Oracle for ~$500M in 2005.

I should note that a university such as the UO has two key “products”: world-leading research results and well-educated student citizens; it is incumbent on the faculty, staff, and the board to support research and teaching excellence, as well as offering students an affordable educational experience that leads to successful graduation and the ability to find employment in their chosen field as a contributing member of society; of course, this must be achieved while demonstrating fiscal prudence. As a practicing member of the UO faculty working on these key “products”, I look forward to working with the rest of the board members to achieve these goals.

In the state of Oregon, it is important that the whole be greater than the sum of its parts. I have previous experience in coordinating activities at the three largest Scottish Universities (Glasgow, Edinburgh, St. Andrews) to create the Scottish Informatics and Computer Science Alliance (SICSA); SICSA was a multi-year collaboration, funded to the tune of $7.5M/annum for five years. SICSA was funded to enable Scottish universities to focus on bleeding-edge research in three emerging areas: I personally led the interdisciplinary activity in Next Generation Networking. This experience has given me insight into ways in which a successful collaboration can be established and operated. Such insight will prove valuable in board discussions regarding interactions among universities in Oregon.

Finally, all through my career I have tried to benefit my unit while contributing to the success of the overarching enterprise. From my leadership positions in academia, I have an excellent understanding of the strategic challenges facing a university, in general, and the University of Oregon, in particular. I have applied this understanding to the HPC project and my involvement as a member of the interim IS leadership team, over and above my normal duties as Professor and Head of Department. I hope you can see that UO’s success is very important to me. If I have the opportunity, I will bring all my skills and energy to being an effective trustee as well as being able to represent the UO faculty in board deliberations.

Please do not hesitate to contact me if you require any additional information regarding my self nomination for the board position.

Prof Joseph S Sventek
+1-541-346-3473
jsventek@uoregon.edu
Bio for Joseph S. Sventek

Education

- Graduated as valedictorian from Sherman Central High School, Sherman, NY, June 1969.
- Graduated *cum laude* with a BA in Mathematics from the University of Rochester, Rochester, NY, in June 1973. Attended the U of R on a Bausch & Lomb Science Scholarship, as well as a New York State Regents Scholarship.
- Graduated with a PhD in Nuclear Chemistry from the University of California, Berkeley, in December 1979.
- Google Scholar lifetime h-index of 25, since 2012 h-index of 14.

Employment

- September 1999 – November 2002: Director, Agilent Laboratories Scotland, Edinburgh, Scotland.
- December 2002 – August 2014: Professor of Communication Systems, School of Computing Science, University of Glasgow, Glasgow, Scotland.
- September 2014 – present: Professor and Head of Department of Computer and Information Science, University of Oregon, Eugene, OR.

Leadership Activities

- Deputy chief architect, ANSA Project, 1986-1990. No financial management, but provided technical leadership for all implementation activities within the project.
- Department manager, HP Labs, 1994-1999. Managed 3 project teams, annual budget of ~$5M.
  - Led several cross-business unit architectural efforts during this time. Two of these activities let to major positive changes in major businesses.
- Software Technology Lab director, HP Labs, 1999. Oversaw a budget of ~$13M/annum, managed the three departments after the abrupt departure of my predecessor. This occurred after
plans were already in place for me to relocate to Scotland to start Agilent Laboratories Scotland; thus held both posts, spending alternate 2-week periods in Palo Alto and Edinburgh.

- Director, Agilent Labs Scotland, 1999-2002. Targeted to grow the staff from 0 to 20 in 3 years. Growth plans halted when tech bubble burst in Spring 2001. Managed a budget of £1.5M/annum when I moved to the University of Glasgow.

- Professor at Glasgow, 2002-2014 – obtained and managed £1.86M/$2.98M of peer-reviewed external research funds; many of the grants were collaborative with other universities in Britain, with a total funding of £5.425M/$8.68M. Managed all Glasgow funding and technical activities.

- Glasgow PI on Scottish Informatics and Computer Science Alliance, 2009-2014 – SICSA was a multi-year collaboration between the computer science/informatics schools at Glasgow, Edinburgh, and St Andrews Universities in Scotland; it was funded to the tune of $7.5M/annum for 5 years, with the funding used for new tenure-track posts, PhD studentships, and funding for workshops and conferences; this was to enable Scottish universities to focus on bleeding-edge research in three emerging areas; I personally led the interdisciplinary activity in Next Generation Networking.

- Head of School at Glasgow 2010-2014. Grew the faculty by 25% during that time. Leveraged available funding to enable the School to rank in the top 10 computer science departments in the UK and top 100 in the world.

- While Head of School at Glasgow, initiated delivery of the Glasgow Honours degree in Computing Science in Singapore with the collaboration of the Singapore Institute of Technology. Hired faculty in Singapore, established the facilities and IT infrastructure, and saw the 1st cohort through their first year (before taking up my position at OU).

- Head of Department at Oregon since arriving in September 2014. Am on a mission to grow the department by 33% by 2020, as well as to grow the size and quality of our PhD program.

- Have been a member of the CAS Dean’s “Wise Heads” group since arriving at UO. Even though the typical tenure for such membership is for 2 years, Dean Marcus explicitly requested that I continue on through this academic year.

- Brad Shelton asked me in November 2015 to convene and direct a committee of faculty and staff to specify, acquire, and stand up a new High-Performance Computer facility at UO. Even though such an activity usually takes in excess of 2 years, under my guidance we were able to complete the specification by May 2016, have all of the equipment arrive on campus by September 2016, and have the system up and running acceptance tests by November 2016. I was a member of the search committee for the Director of the new facility, and he has been in place since 1 December 2016. We are just now engaging alpha testers to shake down the management and control software.

- When Melissa Woo resigned as CIO in February 2016, I was asked to join the interim leadership team for IS, focusing on infrastructure. Under my leadership, we are currently finishing up the installation of redundant 100 gbit/sec switching across campus, and installing 10 gbit/sec edge switches to enable high-speed network access between the HPC and the departments that will use the HPC. The edge switch installation will continue through coming years to bring the entire campus into the 21st century with respect to networking capability.

- In March 2016, I was invited to become involved in the discussions that led to the Knight Campus for Translational and Applied Science. I remain a member of the internal advisory board.
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Eugene, OR 97405
USA

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+1-541-346-3473 (office)
+1-541-346-5373 (fax)
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Electronic mail: jsventek@acm.org (personal)
jsventek@uoregon.edu (office)

www: http://ix.cs.uoregon.edu/~jsventek/

Birth date: 29 January 1952
Birth place: Corry, PA, USA
Nationality: USA

Family: Married, December 1975, to Virginia A. Tucker
One son, J. Gabriel Sventek, born 21 January 1977

Education

- Ph.D. Chemistry, University of California, December 1979; dissertation: “A Non-equilibrium Statistical Mechanical Approach to Heavy-ion Reactions”; supervisor: Prof LG Moretto
- B.A. Mathematics, cum laude, University of Rochester, June 1973

Employment

- September 2014 – present: Head of Department of Computer and Information Science, University of Oregon, Eugene, OR
- September 2014 – present: tenured Full Professor, Department of Computer and Information Science, University of Oregon, Eugene, OR
- August 2010 – July 2014: Head of School of Computing Science, University of Glasgow, Glasgow, Scotland
- December 2002 – August 2014: Professor of Communication Systems, School of Computing Science, University of Glasgow, Glasgow, Scotland
- September 1999 - November 2002: Director, Agilent Laboratories Scotland, Edinburgh, Scotland
- April 1994 - September 1999: Laboratory Scientist for Distributed Computing, Hewlett-Packard Research Laboratories, Palo Alto, CA
- January 1980 - May 1986: Research Computer Scientist, Lawrence Berkeley Laboratory, Berkeley, CA
Honours

- Chair of the UK Computer Research Committee, November 2012 – July 2014.
- Appointed member of the Computer Science and Informatics sub-panel for the 2014 Research Excellence Framework.
- Elected member of the UK Computer Research Committee executive committee, September 2009.
- Keynote speaker at the Distributed Event-Based Systems Conference, June 2007.
- Elected fellow of the Institution of Engineering and Technology, August 2006.
- Elected senior member of the Institute of Electrical and Electronics Engineers.
- Appointed to the Computer Science and Informatics RAE sub-panel for the 2008 Research Assessment Exercise.
- Elected to the UK Computing Research Committee, February 2004
- Keynote speaker at the International Workshop for Quality of Service, June 2001 - “Automated, Dynamic Traffic Engineering in Multi-Service IP Networks”.
- Keynote speaker at the Middleware ‘98 Conference - “An ORB Framework: Customizable Middleware for the Discerning System Developer”.
- Invited expert speaker to the Workshop on Software for the Large Hadron Collider, Barcelona, March 1997.
- Lifetime Achievement Award (for my work in the Virtual Operating System effort described below) from the USENIX Association, January 1997.
- Invited speaker at a meeting of the ARPA task force on survivable systems.
- Invited speaker at the Nomadic ‘96 Conference, San Jose, CA, June 1996.
- Keynote speaker on “Distributed Object Management” at the Research in Data Engineering 1995 Workshop, Taipei, Taiwan.
- Invited speaker at the ANSA Works 1995 Conference, Cambridge, UK.
- Invited lecturer at the University of Newcastle upon Tyne’s Educators’ Symposium, September 1994.
- Recipient of Best Paper Award, NBS Computer Networking Symposium, December 1983
- Elected to Phi Beta Kappa, May 1973
- Recipient of Bausch & Lomb Science Scholarship, June 1969

Academic Positions

- September 2014 – present: Head of Department of Computer and Information Science, University of Oregon, Eugene, OR
- September 2014 – present: tenured Full Professor, Department of Computer and Information Science, University of Oregon, Eugene, OR
- August 2010 – July 2014: Head of School of Computing Science, University of Glasgow, Glasgow, Scotland
- December 2002 – August 2014: Professor of Communication Systems, School of Computing Science, University of Glasgow, Glasgow, Scotland
- Spring 1987: Lecturer, Computer Laboratory, Cambridge University, Cambridge, England
August 1984 - May 1986: Adjunct Lecturer, Electrical Engineering & Computer Science Department, University of California, Berkeley, CA

Research

Current Interests

Grant Funding

Current Completed

- I received a grant from the Carnegie Trust for the Universities of Scotland (£1.7k) to support the travel necessary to organize a research consortium to prepare a research proposal to pursue “Automated Network Management” within the Future Emerging Technologies sub-programme of the EU’s 6th Framework Programme. These monies were used to prepare the DIAS-MC proposal described below.
- As the principal investigator, I received ~£210k over 2.25 years for a proposal entitled “PRISON: Performance and Resilience of IP-based Signalling for Optical Networks” from the EPSRC. Funding started 1 May 2005.
- As the principal investigator, I have received ~£250k over three years for a proposal entitled “Performance Measurement, Management, and Optimization of Peer-to-Peer Applications” from the EPSRC; my co-investigators on the proposal are Dr. L Mathy and Prof. D. Hutchison of Lancaster University and Dr. H de Meer of Passau University (Germany). The project started 1 February 2004. The total funding for all collaborators is ~£650k.
- As the principal investigator, I have received ~£250k over three years for a proposal entitled “AMUSE: Autonomic Management of Ubiquitous Systems for e-Health” from the EPSRC; my co-investigators on the proposal are Dr. E. Lupu, Dr. N. Dulay, and Prof. M. Sloman of Imperial College London. The project started 1 February 2004. The total funding for all collaborators is ~£525k.
- I nominated Ross C McIlroy for a Carnegie Trust PhD Fellowship to pursue a PhD under my supervision; this fellowship was granted, and Mr. McIlroy started his studies 1 October 2005. This fellowship is worth ~£47k over three years.
- As the principal investigator, I received ~£250k over three years for a proposal entitled “Design, Implementation, and Adaptation of Sensor Networks through Multi-dimensional Co-design (DIAS-MC)” from the EPSRC; my co-investigators on the proposal are Prof. R Morrison/St. Andrews, Prof. J Dunlop/Strathclyde, Dr. AAA Fernandes/Manchester, and Prof. I Marshall/Lancaster. Funding started 1 October 2005. Total funding for all collaborators is ~£1.25M. Glasgow is the lead institution in this consortium.
- As the principal investigator, I received ~£500k over three years and one half years for a proposal entitled “Homework: Shaping Future User Centred Domestic Infrastructures” from the EPSRC WINES III Programme; my co-investigators on this collaborative proposal are Prof. T Rodden/Nottingham and Dr. N Dulay/Imperial. Prof M Calder and Dr M Chalmers are co-investigators at Glasgow. Total requested funding for all collaborators is ~£1.6M. Nottingham is the lead institution in this consortium.
- As a co-investigator, Glasgow received ~£400k over three years for a proposal entitled “AnyScale Applications” from the EPSRC SADEA Programme; the Glasgow principal investigator is Dr J Singer, and our co-investigators on this collaborative proposal are Dr V Nagarajan/Edinburgh and Dr. M Lujan/Manchester. Total funding for all collaborators is ~£1.2M. Glasgow is the lead institution in this consortium.
- I nominated Paul Harvey for a Carnegie Trust PhD Fellowship to pursue a PhD under my supervision; this fellowship was granted, and Mr. Harvey started his studies 1 October 2011. This fellowship is worth ~£66k over 42 months.
Pending

- No grant applications are currently pending

Publications

2016


2015


2014


2013


2012


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1 Numbers in square brackets indicate the Google Scholar citation count for a particular publication as of 13 October 2016.


2011


2010


2009


2008


2007


[34] W. Emmerich, M. Aoyama and J. Sventek, “The impact of research on middleware technology”, ACM SIGSOFT Software Engineering Notes, Volume 32, Issue 1, pp. 21-46, January 2007. [34]


2006


2005


2004


(Additional publications listed below in the Industry and PhD sections.)

Teaching

Courses Taught2

Oregon courses

- CIS 415, Operating Systems, level 3/4: Spring Quarter 2015, Spring Quarter 2016, Fall Quarter 2016
- CIS 210, Introduction to Computer Science I, level 1/2: Fall Quarter 2015, Fall Quarter 2016

2 Level 1 = freshman, level 2 = sophomore, level 3 = junior, level 4 = senior, level 5 = graduate student course.
Glasgow courses

- Object-Oriented Software Engineering, level 2: Spring 2008, Spring 2009
- Distributed Algorithms and Systems, level 4: Autumn 2008
- C Language Programming, level 3: Autumn 2007
- Real Time and Embedded Systems, level 4: Spring 2004
- Research Methods & Techniques, level 5: Autumn 2004
- Advanced Research Readings in Systems, level 5: Spring 2013, Spring 2014
- Advanced Topics in Computing Science, level 5: Autumn 2004

Institute of System Level Integration (level 5) courses

- Sensor Networks: Spring 2010
- Embedded Networking: Spring 2010
- Embedded Applications: Spring 2004, Spring 2005
- Embedded Software Basics: Autumn 2004

Other institutions

- Digital Communications, undergraduate level 3/4, Cambridge, Spring 1987

Courses Developed

- Object-Oriented Software Engineering, level 2, Glasgow, Spring 2008.
- C Language Programming, level 3, Glasgow, Autumn 2007
- Advanced Programming, level 3, Glasgow, Autumn 2010
- Embedded Applications, Level 5, ISLI, Spring 2005.
- Research Methods & Techniques, Level 5, Glasgow, Autumn 2004
- Advanced Topics in Computing Science, Level 5, Glasgow, Autumn 2004
- Real Time and Embedded Systems, level 4, Glasgow, Spring 2004

Programmes Developed

- MSc in Sensor Networks, Institute of System Level Integration, Autumn 2012.
- Level 1 stream for non-honours students, University of Glasgow, Autumn 2009
- Level 2 Software Engineering Curriculum, University of Glasgow, Autumn 2007
- Advanced MSc in Computing Science, University of Glasgow, Autumn 2004
- MSci³ in Computing Science, University of Glasgow, Autumn 2004

³ MSci is a 5-year, integrated masters programme.
Student Supervision

Research in Progress

- PhD studies, Eugene Osborne. Research area: linguistic approaches to heterogeneous multicore computers.

Research Completed

- Riaz ul Amin, “Vehicular ad hoc communication in unplanned urban areas”, PhD, awarded June 2015.
- Ross McIlroy, “Using Program Behaviour to Exploit Heterogeneous Multi-Core Processors”, PhD, awarded June 2010.
- Guobin Han, “Grid Scheduling Veneer”, MSc. awarded December 2005.

Projects in Progress

Projects Completed

- MSci project, Fergus Leahy, “IoT/Smart Home Router Integration”, April 2014.
- BSc(Hons) project, Shinyi Breslin, “Insense Simulator”, March 2014.
- BSc(Hons) project, Kristian Hentschel, “Implementing Insense with OpenCL”, March 2014.
- BSc(Hons) project, Dmitrijs Kovalenko, “Insense code generation tool and porting the Insense language to 32-bit systems.”, March 2014.
- BSc(Hons) project, Fergus Leahy, “A lightweight protocol for constrained devices for use in the Internet of Things paradigm”, April 2013.
- BSc(Hons) project, Javier Lazaro Munoz, “Garbage Collector based on Reference Counting for InceOs”, April 2013.
• BSc(Hons) project, Xun Zhang, “Scheduling Issues in the Emulation of Large Sensor Networks”, April 2013.
• MSci project, John Morton, “Nest - Implicit Parallel Python”, April 2012.
• BSc(Hons) project, Jonathan Balkind, “Flow classification of home network traffic using machine learning techniques”, April 2012.
• BSc(Hons) project, Calum McCall, “Secure Remote Management Of Home Networks”, April 2012.
• MSci project, Marcin Orczyk, “Islands - a Hybrid Haskell Runtime System”, April 2011.
• BSc(Hons) project, John Morton, “Cobweb - Web Access to Current and Archived Data from an Ad-hoc Wireless Sensor Network”, April 2011.
• MSci project, David Warnock, “Dynamic Affinity Scheduling in Heterogeneous Multi-Core Processors”, April 2009.
• BSc(Hons) project, Neil Henning, “Software Transactional Memory on the Cell Microprocessor”, April 2009.
• BSc(Hons) project, Paul Harvey, “Contiki Meets Xen”, April 2009.
• BSc(Hons) project, Vincent Gatehouse, “A Virtual Memory System for Resource Constrained Environments”, April 2009.
• BSc(Hons) project, Filip Wieladek, “k-resilient Wireless Sensor Networks”, April 2008.
• BSc(Hons) project, Jamie Coates, “Efficient Routing Protocol Support for TinyOS”, April 2008.
• BSc(Hons) project, Alasdair Maclean, “Xen Meets TinyOS”, April 2008.
• BSc(Hons) project, Martin Ellis, “Security in Environmental Sensor Networks”, April 2008.
• BSc(Hons) project, David Lindores, “OSPF Network Simulation”, April 2006.
• BSc(Hons) project, Chris Miller, “Mobile Phone Forensics”, April 2006.
• MSc. project, Shantnu Tiwari, “3D Gaming on the ARM SMP Multiprocessor”, September 2005.
• BSc(Hons) project, John Ewing, “Using Analysis of OSPF Packets to Determine Network Topology”, April 2005.
• BSc(Hons) project, Alexnewton Alexander, “Portable Interactive WLAN Troubleshooting Tool”, April 2004.
• BSc(Hons) project, Oliver Sharma, “Java Packet Monitoring Toolkit”, April 2004.
• BSc(Hons) project, Mark Bryars, “Embedding NS/2 simulations in a real network”, April 2003.

**Internal/External Ph.D. Examinations**

• Mohammed Alenezi, University of Essex, “Detecting, Tracing and Mitigating Against Denial of Service in IP Networks”, August 2014.
• Marinos Charalambides, University of Surrey, “Policy Analysis for DiffServ Quality of Service Management”, July 2009.
• Jamal-den Abdulai, University of Glasgow, “Probabilistic Route Discovery for Wireless Mobile Ad Hoc Networks (MANETs)”, January 2009.
• Eiko Yoneki, University of Cambridge, “ECCO: Data centric asynchronous communication”, October 2006.
• Alastair Hampshire, University of Nottingham, “Extending the Open Grid Services Infrastructure to Intermittently Available Network Environments”, December 2005.
• Parisis Flegkas, University of Surrey, “Policy-based Quality of Service Management for IP Networks”, June 2005.
• **Ian MacDonald**, University of Glasgow, “Memory Management in a Distributed System of Single Address Space Operating Systems Supporting Quality of Service”, May 2001. (I was external examiner, as I was employed by Agilent Technologies at the time.)

**Internal/External M.Sc. Examinations**


**Administration**

**Current Responsibilities**

• Head of Department of Computer and Information Science, University of Oregon.
• Led a task force to specify, acquire, and operationalize a new High Performance Computing (HPC) Facility at the University of Oregon. This facility was operational in December 2016; it operates at ~250 TFlops, and has 1.5 PB of high-speed parallel storage.
• Member of the interim management team for the Information Services function at the University of Oregon, particularly focused on infrastructure activities. We are currently installing redundant core network switches, operating at 100 gbit/sec, and planning the installation of 10 gbit/sec edge switches in various building across campus; initial rollout is focused on the HPC and departments that will be the initial users of that facility. Full deployment of edge switches will be a 4-5 year effort.
• Chairman of the Faculty Advisory Committee for the HPCF.
• Member of College of Arts and Sciences “Wise Heads”, September 2014 – present.
• Member of the Internal Advisory Board for the Knight Campus for Translational and Applied Science at the University of Oregon.

**Past Responsibilities**

• Member of search committee for a new CIO and for the director of the HPCF.
• Head of School of Computing Science, University of Glasgow.
• Deputy directory, Scottish Informatics and Computer Science Alliance.
• Convenor of the Glasgow DCS research committee.
• Represent Glasgow DCS on the management committee for the Institute of System Level Integration, Livingston.
• Represent Glasgow DCS on the management committee for the Faculty of Information and Mathematical Sciences.
Industry

Research

Positions

- April 2002 - November 2002: Research Fellow, Communications Systems, Agilent Laboratories, Edinburgh, Scotland
- September 1999 - March 2002: Distinguished Engineer for Distributed Computing, Agilent Laboratories, Edinburgh, Scotland
- April 1994 - August 1999: Distinguished Engineer for Distributed Computing, Hewlett-Packard Research Laboratories, Palo Alto, CA
- April 1991 - March 1992: Senior Engineer, Distributed Application Architecture Laboratory, Information Architecture Group, Hewlett-Packard Company, Cupertino, CA
- August 1990 - March 1991: Software Design Engineer, Distributed Application Architecture Laboratory, Information Architecture Group, Hewlett-Packard Company, Cupertino, CA
- January 1980 - May 1986: Research Computer Scientist, Lawrence Berkeley Laboratory, Berkeley, CA

Grant Funding

Completed

- As the principal investigator, I received ~$1.2M over four years for a proposal entitled “Local Area Network Measurement and Modeling” from the U.S. Department of Energy, Basic Energy Sciences, Applied Mathematical Sciences Division. Funding started 1 June 1982, ended 31 May 1986.
- As the principal investigator, I received ~$200k in kind (4 x Vax-11/750 computers) for a proposal entitled “Scientific Workstation Computers in Heterogeneous Network Environments”, Digital Equipment Corporation External Research Program. These machines were delivered for use in June 1983.

Publications

2002


2001


2000


1999


1998


1996


1992


1987


1984


1982


1980


Technical Reports


**Patents**

[64] Francisco Garcia, Robert Gardner and Joseph S Sventek, MEASURING NETWORK OPERATIONAL PARAMETERS AS EXPERIENCED BY NON SYNTHETIC NETWORK TRAFFIC, European patent 1,401,147. [94]

[65] Andrew Lehane, Francisco Garcia and Joseph S Sventek, IDENTIFYING NETWORK ROUTERS AND PATHS, European patent 1,387,527. [33]


**Management**

- **October 1999 - April 2002**: Manager, Communications Solutions Department, Agilent Laboratories
- **February 1999 - September 1999**: Director of the Software Technology Laboratory, Hewlett-Packard Research Laboratories, Palo Alto, CA
- **April 1995 – January 1999**: Manager of the Distributed Middleware Department, Hewlett-Packard Research Laboratories, Palo Alto, CA

**PhD**

**Research**

After completing my undergraduate degree in Mathematics at the University of Rochester, I enrolled as a PhD student in the College of Chemistry at the University of California, Berkeley. I was interested in possibly pursuing research into quantum or nuclear chemistry. After some deliberation, I chose to study nuclear chemistry under the supervision of Prof. L.G. Moretto.

I worked on a number of topics during my PhD career. The primary research was into semi-classical methods for describing the reaction products from heavy ion reactions, with projectile energies in the 10-30 MeV/nucleon range. The rest of Moretto's group measured the reaction products for these types of reactions at the 88° Cyclotron and the
Heavy Ion Linear Accelerator at Lawrence Berkeley Laboratory; I assisted the group, but together with Prof Moretto, I was primarily focused on the theory behind these reactions. We coined the term “nuclear diffusion” for the mechanism behind these reactions, as the reaction products exhibited characteristics consistent with a rotating complex of the projectile and target nuclei, with an approach-to-equilibrium process diffusing nuclei through the complex, driven by nuclear and electromagnetic gradients. Besides the publications listed below, this resulted in the dissertation entitled “A Non-equilibrium Statistical Mechanical Approach to Heavy-ion Reactions”.

**Publications**

**1982**


**1979**


**1978**


**1977**


**1976**


[77] L.G. Moretto and J.S. Sventek, “Diffusive phenomena reflected in the charge and angular distributions of N, Ne, Ar, Kr induced reactions”, Symposium on macroscopic features of heavy ion collisions, Argonne, IL, USA, 1 April 1976.


**1975**


**1974**


Professional Service

General Chair and/or Program Chair/Co-Chair

- Program Co-Chair, Distributed Event-Based Systems Conference, Cambridge, UK, July 2010.
- General Co-Chair, ACM/IFIP/USENIX International Conference on Distributed System Platforms (Middleware), Melbourne, Australia, November 2006
- Program Co-Chair, IEEE Workshop on Self-Managing Computer Systems, May 2005
- General Chair, ACM/IFIP International Conference on Distributed System Platforms (Middleware), Heidelberg, Germany, November 2001
- Program Co-Chair, ACM/IFIP International Conference on Distributed System Platforms (Middleware), New York, NY, April 2000
- Program Chair for the USENIX Conference on Object-Oriented Technologies and Systems (COOTS), Santa Fe, NM, May 1998.

Program Committee Member

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Conference/Workshop</th>
<th>Year[s]</th>
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<tbody>
<tr>
<td>ACNM</td>
<td>Workshop on Autonomic Communication and Network Management</td>
<td>2007</td>
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<tr>
<td>COMPSAC</td>
<td>International Computer Software and Application Conference</td>
<td>2005</td>
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<tr>
<td>DISN</td>
<td>Workshop on Data Intensive Sensor Networks</td>
<td>2007</td>
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<tr>
<td>DSOM</td>
<td>IFIP/IEEE Conference on Distributed Systems: Operations and Management</td>
<td>2005</td>
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<tr>
<td>HPDC</td>
<td>IEEE High-Performance Distributed Computing Conference</td>
<td>2002</td>
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<tr>
<td>ICDCS</td>
<td>IEEE International Conference on Distributed Computing Systems</td>
<td>2006</td>
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<tr>
<td>IWOoS</td>
<td>International Workshop on Quality of Service</td>
<td>2005</td>
</tr>
<tr>
<td>SASO</td>
<td>IEEE International Conference on Self-Adaptive and Self-Organizing Systems</td>
<td>2007</td>
</tr>
<tr>
<td>SIGCOMM</td>
<td>ACM Special Interest Group in Communications Conference</td>
<td>2003</td>
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</table>
Knowledge Transfer

As manager of the Distributed Middleware Department at HP Laboratories, I led the HP efforts to spin out the results of one of our research groups to form a startup company in 1998 named TimesTen Performance Software; the initial valuation of the company was $5M. I attended board meetings, representing HP’s investment in the company, until I relocated to Scotland in May 1999 to start Agilent Laboratories Scotland. TimesTen was acquired by Oracle in June 2005 for ~$500M.

Other Activities

- 2009, became member of the executive committee of the UKCRC
- 2006, became member of steering committee for the UK Grand Challenge effort
- 2003, member of organizing committee for European Personal Mobile Communications Conference
- 1999, chair for Advanced Topics Workshop at COOTS 1999
- I am an adviser to the Wiley Series in Communications Networking and Distributed Systems.
- I was formerly a member of the National e-Science Centre Scientific Advisory Board.
- I am a member of IFIP, TC6, WG6.1.
- I am a member of the technical advisory board for the École Polytechnique Fédérale de Lausanne (Information and Communications Department).
- I was the editor of a special issue of the Distributed Systems Engineering Journal.
- I was one of the guest editors for a special issue of the IEEE Journal on Selected Areas of Communication; this special issue was devoted to enabling platforms for multimedia applications.
- I was on the editorial board of the Distributed Systems Engineering Journal, co-published by the British Computer Society, the Institution of Electrical Engineers, and the Institute of Physics Publishing.
- Consultation on network and software engineering topics has been provided for C.E.R.N. (the European Center for Nuclear Research), the Jet Propulsion Laboratory, TRW Defense and Space Systems Group, and Ford Aerospace Western Development Laboratory.

Grant Reviewing

- Review progress of the SELFMAN FP6 STREP for the European Commission.
- Review progress of the ARTIST2 FP6 network of excellence for the European Commission.
- Member of the EPSRC College of Reviewers, reviewing approximately 12 proposals each year.
- Occasional reviews for NSERC (Canada) and NOW (Netherlands).

Professional Societies

- Fellow, British Computer Society (BCS)
• Fellow, Institution of Engineering and Technology (IET)
• Fellow, Royal Society of Edinburgh (RSE)
• Senior Member, Institute of Electronic and Electrical Engineers (IEEE)
• Member, Association for Computing Machinery (ACM)
• Member, UK Computing Research Committee (UKCRC)

Extra-curricular Activities

• I swim and cycle to maintain fitness.
• I was formerly an active triathlete, competing in races spanning the spectrum from sprint distance to Ironman distance. I also competed in road races ranging from 5Ks to marathons. I placed in my age group in these races more often than not.
• I have played euphonium and French horn in the Glasgow Computing Brass, an amateur brass quartet/quintet.
• I was the principal french horn for the HP Symphony Orchestra.
• I am a former member of the Oakland Symphony Chorus.
• I have performed with the San Francisco Sinfonia.
• I was a founding member and on the executive board of St. Mary’s Chamber Choir, Ely. I have performed a variety of classical works, both as a tenor and a bass.
• I occasionally performed with the Ely Sinfonia (4th french horn).

References

Available upon request.