Zygmunt J. Haas Curriculum Vitae

Section #	<u>Title</u>	Pages
I.	General Information	2-4
II.	Talks, Invited Talks, Keynote Speeches	5 – 9
III.	Publications	10 - 31
(i)	Refereed Journal & Archival Publications	10 – 17
(ii)	Refereed Conference & Workshop Papers	17 – 29
(iii)	Books & Book Chapters	29 - 31
(iv)	Miscellaneous Publications	31
IV.	Courses Taught	32 – 33
V.	Professional & Scientific Service	34 – 43
(i)	University Committees	34 – 35
(ii)	Editorial Service	35 - 36
(iii)	Service to the Scientific Community at Large	36 - 38
(iv)	Technical Program Committees	38 - 43
VI.	Patents: Granted & Pending	44 – 45

A R M Find authenticated court documents without watermarks at <u>docketalarm.com</u>.

DOCKET

Δ

I. GENERAL INFORMATION

(i) Personal Information

Name: Zygmunt J. Haas

Titles:① Professor and Distinguished Chair in Computer Science (Univ. of Texas at Dallas)② Professor Emeritus (Cornell University; Electrical and Computer Engineering)

Professional Contact Information:

② Cornell University: <u>Address:</u> School of Elect. & Comp. Eng, Ithaca, NY 14853 <u>E-mail:</u> zhaas@cornell.edu <u>URL:</u> http://people.ece.cornell.edu/~haas Lab URL: http://wnl.ece.cornell.edu

University of Texas at Dallas <u>Address:</u> Erik Jonsson School of Engineering and Computer Science ECSS Room 4.405 Richardson, TX 75080 <u>Phone:</u> (972)-883-3571 <u>E-mail:</u> haas@utdallas.edu <u>URL:</u> http://www.utdallas.edu/~haas

(ii) Main Research Interests

- * Wireless and Mobile Systems and Networks
 - ***** Wireless Communications
 - ***** Communication Protocols for Wireless Networks
 - * Security in mobile and wireless networks
 - * Ad Hoc and Sensor Networking Technologies
 - ***** Energy-efficient Protocols
- * Information Assurance and Network Security
- * Cyber-Physical Systems (CPS) and Internet of Things
- * Design, Modeling, and Implementation of Multimedia Protocols and Systems
- * Modeling of Communication Systems
 - ***** Complex Networks
 - ***** Stochastic Routing

DOCKET

* Cross-Disciplinary Research Initiatives

(iii) <u>Education/Degrees</u> (in reverse chronological order)

***** Ph.D., Electrical Engineering, Stanford University, CA, May 1988

Advisor: Prof. David Cheriton, Computer Science, Stanford University Thesis: "Packet Switching in Fiber-Optic Networks"

- * M.Sc., (Summa Cum Laude) Electrical Engineering, Tel-Aviv University, Israel, Feb. 1985
- * <u>B.Sc.</u>, (Summa Cum Laude) Electrical Engineering, Technion (IIT), Israel, August 1979
- (iv) <u>Employment History</u> (in reverse chronological order)
- 8/13 present: University of Texas at Dallas, Computer Science Department Erik Jonsson School of Engineering and Computer Science, Richardson, TX <u>Title:</u> Professor and Distinguish Chair in Computer Science
- 8/95 present: Cornell University, School of Electrical and Computer Engineering, Ithaca, NY <u>Title:</u> Professor Emeritus (as of 10/13)

7/2004 –10/2013: Tenured Full Professor

11/1998 - 6/2004: Tenured Associate Professor

- 8/1995 10/1998: Associate Professor
- 5/10 6/11: National Science Foundation, Engineering Directorate, Arlington, VA; <u>Title:</u> Program Director; <u>Comment:</u> on leave from Cornell University

1/03-05/03: Visiting Fellow, Princeton University, EE Department

- 09/94 7/95: AT&T Business Communication Services, Murry Hill, NJ; <u>Title:</u> Member of Technical Staff
- 05/88 7/95: AT&T Bell Laboratories, Network Research, Holmdel, NJ; <u>Title:</u> Member of Technical Staff
- 09/85 5/88: Electrical Eng. Dept., Stanford University, CA, <u>Title:</u> Research Assistant
- 10/79 8/85: R&D Department of Government of Israel, Tel-Aviv, Israel; <u>Title:</u> Engineer
- **10/81 6/85:** Electrical Eng. Dept., Tel-Aviv University, Israel; <u>Title:</u> Teaching Assistant
- 8/79 10/79: Philips Research Laboratories, Eindhoven, Holland; <u>Title:</u> Engineer

(v) Selected Awards and Honors

DOCKET

- * Fellow of the Association for Computing Machinery (ACM), 2021 (UTD announcement)
- ***** "How 5G Technology May Improve and Impact Our Lives" Authority Magazine Interview, June 4, 2021 (link) (UTD Announcement)
- ***** Fellow of the AAIA (Asia-Pacific Artificial Intelligence Association), 6/2021 (9/28/2021)
- * Best Paper Award for the paper [Z.J. Haas and Z. Zheng, "Engineering a Network in the Sky," The 35th International Conference on Information Networking, (*ICOIN21*), January 13–16, 2021, Jeju Island, S. Korea] (UTD announc.) (Cornell announc.)
- ***** Guide2Research Scientists 2020 Ranking: 315th (US) and 495 (Worldwide)
- * Distinguished Member of the European Alliance for Innovation (EAI), 2021
- ***** Fellow of the *European Alliance for Innovation (EAI)*, May 2019 (Fellow selection)
- * Fellow of The Institute of Engineering and Technology (IET), March 2019
- * "5 Things to Know About 5G" UT Dallas Magazine, October 14, 2019
- * 2016 IEEE ComSoc AHSN Recognition Award ("for outstanding contributions to securing ad hoc and sensor networks") presented at *IEEE Globecom 2016*, December 5, 2016, Washington DC (AHSN Recognition Award); Cornell's faculty awards
- * Elevation to IEEE Fellow, January 2007, "for contribution to wireless and mobile ad hoc networks" (award letter)
- * Status of "Professor Emeritus" at Cornell University (as of October 15, 2013)

- ***** 2012 IEEE ComSoc WTC Recognition Award (the award recognizes individuals for "outstanding technical contributions in the field and for his service to the scientific and engineering communities") presented at IEEE Globecom 2012, December 5, 2012, Anaheim, CA (WTC Recognition Awards)
- * Distinction of *Classic Paper by Google Scholar* for the paper "Gossip-based Ad Hoc Routing," *IEEE/ACM Transactions on Networking*, vol.14, no.3, June 2006
- * "Best Paper Award" for the paper "Collaborating with Correlation for Energy Efficient WSN," [M. Nikolov and Z.J. Haas], *First ACM Annual International Workshop* on Mission-oriented Wireless Sensor Networking (ACM MiSeNet 2012), in conjunction with ACM MobiCom 2012, Istanbul, Turkey, August 26, 2012
- * IEEE Distinguished Lecturer Tour, Scandinavian Countries, May 25 June 5, 2009
- * Promotion to the rank of *Full Professor*, School of ECE, Cornell Univ., July 1, 2004
- * Distinguish Lecturer, IEEE Communications Society, (two terms) 01/2004 12/2005, 01/2005 - 12/2007
- ***** IEEE Distinguished Lecturer Tour, Australia, September 26-October 3, 2005
- * Expert Lecturer, IEEE Communications Society, 2002-2004
- * Michael Tien'72 Excellence in Teaching Award, Cornell College of Engineering for 2002-2003 academic year, November 2003
- * "Best Paper Award" for the paper "Optimal Resource Allocation for UWB Wireless Ad Hoc Networks," [C. Zou and Z.J. Haas], IEEE 16th International Symposium on Personal Indoor and Mobile Radio Communications (PIMRC'05), ICC Berlin, Germany, September 11-14, 2005
- * Michael Tien'72 Excellence in Teaching Award, Cornell College of Engineering for 2002-2003 academic year, November 2003
- * "Highly Commended Paper Award" for the paper "Performance Evaluation of the Modified IEEE 802.11 MAC for Multi-Channel Multi-Hop Ad Hoc Network," [J. Li, Z.J. Haas, M. Sheng, and Y. Chen], IEEE International Conference on Advanced Information Networking and Applications (AINA 2003)
- Elected Chair of the IEEE Technical Committee on Personal Communications (TCPC), Jan. 2001 – Nov. 2002 (previously elected Vice Chair and Secretary)
- * Michael Tien'72 Excellence in Teaching Award, Cornell College of Engineering for 1999-2000 academic year, September 2000
- ***** Election to *Indefinite Tenure*, Cornell University, October 1998
- Michael Tien'72 Excellence in Teaching Award, Cornell College of Engineering for 1996-1997 academic year, September 1997 (letter) (banquet)
- ***** AT&T Foundation Award, September 1995
- ***** President Award, Technion, Israel (1976, 1977, 1978, and 1979)
- * B.Sc. w/ "Summa Cum Laude," Aug. 1979; M.Sc. w/ "Summa Cum Laude," Feb. 1985
- (vi) Memberships in Professional Societies
 - ***** IEEE Communications Society (ComSoc)

DOCKET

- ***** Association for Computing Machinery (ACM)
- * Special Interest Group on Mobile Communications (SIGMOBILE)

(vii) <u>Membership in Graduate Fields + Affiliate Membership</u> (date awarded)

- * Electrical and Computer Engineering, Cornell University, August 1995
- ***** Computer Science, Cornell University, February 2001
- * Center for Applied Math, Cornell University, April 2003
- * Electrical Engineering, University of Texas at Dallas, April 4, 2015

II. TALKS, INVITED TALKS, & KEYNOTE SPEECHES

<u>Invited and Keynote Talks</u> (in reverse chronological order)

- * Zygmunt J. Haas, "Reconfigurable Distributed MIMO for Physical-layer Security in Mobile Networks," *Invited Talk*, 40th IEEE Sarnoff Symposium, NJIT, Newark, NJ, Sep. 23, 2019 (Invited Talks) (plaque)
- ***** Z.J. Haas, "Reconfigurable Distributed MIMO for Physical-layer Security in Mobile Networks," *ECE Seminar Series*, Stevens Institute of Technology, March 27, 2019 (announcement)
- ***** Z.J. Haas, "Reconfigurable Distributed MIMO for Physical-layer Security in Mobile Networks," *Invited Talk*, Joint ECE/CS Seminar, Stony Brook University, February 28, 2019 (announcement)
- ***** Z.J. Haas, "Reconfigurable Distributed MIMO for Physical-layer Security in Mobile Networks," *ACCESS* Distinguished Lecture, KTH Royal Institute of Technology, Stockholm, Sweden, September 13, 2018 (announcement)
- ***** Z.J. Haas, "Challenges of Internet of Things," Spring 2017 Computer Science Distinguished Lecture Series, Norfolk State University, Computer Science Department, April 6, 2017 (plaque)
- ***** Z.J. Haas, "Research Directions of the Wireless Networks Lab," Computer Science Department, Wesleyan University, Fort Worth, TX, March 31, 2016
- Z.J. Haas, "Challenges of Internet of Things," Fourth Annual International Workshop on Mission-Oriented Wireless Sensor Networking (*MiSeNet 2015*), Dallas, TX, October 19, 2015
- * Z.J. Haas, "Security of Big Data," Third Annual International Workshop on Mission-Oriented Wireless Sensor Networking (*MiSeNet 2014*), Philadelphia, PA, October 27, 2014
- ***** Z.J. Haas, "Big Data and Its Security Implications," National Taiwan University (NTU), Taipei, Taiwan, December 16, 2013
- ***** Z.J. Haas, "Big Data and Its Security Implications," National Sun Yat-sen University, Kaohsiung, Taiwan, December 18, 2013
- ***** Z.J. Haas, "Big Data and Its Security Implications," National Tsing Hua University, Hsinchu, Taiwan, December 19, 2013
- * Z.J. Haas, "Big Data and Security Implications," Keynote Speech, EUSPN'13, 4th International Conference on Emerging Ubiquitous Systems and Pervasive Networks, Niagara Falls, Ontario, Canada, October 21-24, 2013
- ***** Z.J. Haas, "Security of Big Data," at the Cornell Engineering Alumni Association conference, Washington, DC, May 13, 2013
- * Z.J. Haas, "Stochastic Routing," DIMACS Workshop on Connectivity and Resilience for Large-Scale Networks, Rutgers University, Piscataway, NJ, April 12-13, 2012
- * Z.J. Haas, "Information Assurance for Sensor Networks," Winter 2012 CIS Distinguished Lecture Series, Computer and Information Science Department, College of Engineering and Computer Science. University of Michigan-Dearborn, March 16, 2012
- ***** Z.J. Haas, "Information Assurance for Sensor Networks," Invited Talk, Department of Electrical Engineering and Computer Science, UC Berkeley, Berkeley, CA, September 7, 2011

DOCKET

DOCKET A L A R M



Explore Litigation Insights

Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time alerts** and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.