

# George V. Neville-Neil - Curriculum Vitae

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## Contact Information

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## Education

09/2023 - Present	<b>Yale University</b> , New Haven, CT, U.S.A Candidate for Ph.D. in Computer Science Advisors: Avi Silberschatz and Robert Soulé
09/1985 - 06/1990	<b>Northeastern University</b> , Boston, MA, U.S.A. BS in Computer Science.

## Employment History

### Academic Positions

09/2025 - <i>present</i>	<b>Yale University</b> , Departments of Computer Science and Electrical Engineering, New Haven, CT, USA Teaching Fellow: CPSC 611 - Topics in CS & Global Affairs
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### Industrial Positions

06/2014 - <i>present</i>	<b>University of Cambridge</b> , Computer Laboratory, Cambridge, UK Industrial Visitor
03/2014 - present	<b>MSB Associates</b> , Belmont, CA & Brooklyn NY USA Principal and Co-Owner
01/2008 - 1/2014	<b>Hudson River Trading</b> , New York, NY, USA Operating System Developer and Time Guru
08/2004 - 12/2007	<b>Yahoo Inc.</b> , Mountain View, CA, USA Paranoid Yahoo - Tokyo Japan and Globally Deployed
05/2002 - 08/2004	<b>Nominum In.</b> , Redwood City, CA, USA Senior Software Engineer
07/1999 - 11/2001	<b>Wind River Systems</b> , Alameda, CA, USA Senior Member of Technical Staff - Operating Systems Design
03/1999 - 06/1999	<b>Siara Systems</b> , Mountain View, CA, USA Senior Software Engineer - TCP/IP Internals
12/1995 - 02/1999	<b>Wind River Systems</b> , Alameda, CA, USA Manager Core Network Technologies

## Awards & Honors

### Awards and Fellowships

2025	Honorable Mention in the 2025 U.S. National Science Foundation (NSF) Graduate Research Fellowship Program
2024	SoCC'24 Reviewer Award

## Research

### Research Interests:

Operating Systems, Networking, Security.

## Service

### Program Committees

TPC Chair	AsiaBSDCon 2005-2019, 2026
TPC Member	SoCC'26, BSDCan 2014-2022
Reviewer	SoCC'25

### General Chair

2016	Applicative (ACM's Practitioner Conference)
2015	Applicative (ACM's Practitioner Conference)

### TPC Chair

2026	AsiaBSD Conference Co-Chair( <b>ABSDCon</b> )
2005-2019	

### TPC Member

2026	ACM Symposium on Cloud Computing ( <b>SOCC '26</b> )
2014-2022	BSDCan Conference ( <b>BSDCan</b> )

### Editorial Boards

2004 - <i>present</i>	Member of the ACM Queue Magazine Advisory Board
2014-2019	Editor in Chief, FreeBSD Journal

### Boards and Task Forces

09/2023 - 6/2025	Co-Chair ACM Presidential Task Force on Globalization
2014-2016	Chair of ACM Practitioner Board
1990 - <i>present</i>	Member of Usenix Association 1990 to present.
1993 - <i>present</i>	Member of ACM 1993 to present.

## Open Source Software

2020-2022	Core Member of the FreeBSD Project
2014-2016	Core Member of the FreeBSD Project
2006-2010	Core Member of the FreeBSD Project (2 Terms)
2004 - <i>present</i>	Committer to the FreeBSD Project
2008-2014	Co-Developer Precision Time Protocol Daemon, (PTPd)

## Publications

### Books

1. George V. Neville-Neil. *The Kollected Kode Vicious* Addison-Wesley, Nov, 2020.
2. Kirk McKusick, George V. Neville-Neil, Robert N. M. Watson. *The Design and Implementation of the FreeBSD Operating System 2nd Ed. (D&I2)*, Addison-Wesely, September 2014.
3. Kirk McKusick, George V. Neville-Neil *The Design and Implementation of the FreeBSD Operating System. (D&I)*, Addison-Wesely, September 2004.

## Journal Articles

4. George V. Neville-Neil. Code Spelunking: Exploring Cavernous Code Bases. In *ACM Queue* September 2003.
5. George V. Neville-Neil. Programming Without a Net. In *ACM Queue* April 2003.
6. Telle Whitney, George V. Neville-Neil. SoC: Software, Hardware, Nightmare, Bliss. In *ACM Queue* April 2003.
7. George V. Neville-Neil. Current Efforts in Client/Server Audio. In *The X Resource* Fall 1993.

## Conference Publications

8. Robert Soulé, George Neville-Neil, Stelios Kasouridis, Alex Yuan, Avi Silberschatz, and Peter Alvaro. OSDB: Exposing the Operating System's Inner Database. In *Proceedings of the 2025 Conference on Innovative Data Systems Research (CIDR '25)*, January 2025. Acceptance rate: *N/A*.
9. George V. Neville-Neil. *Through the Wire: Measurement and Improvement of a software based IPSec implementation, Part II* At *BSDCan 2016*
10. George V. Neville-Neil. *Through the Wire: Measurement and Improvement of a software based IPSec implementation* At *AsisBSDCon 2016*
11. George V. Neville-Neil. *Measure Twice, Code Once: Network Performance Analysis for FreeBSD, Part II* At *AsisBSDCon 2015*
12. George V. Neville-Neil. *Cambridge L41: Teaching Advanced Operating Systems with FreeBSD* At *BSDCan 2015*
13. George V. Neville-Neil. *Measure Twice, Code Once: Network Performance Analysis for FreeBSD* At *AsisBSDCon 2015*
14. George V. Neville-Neil. *Computers, Clocks and Network Time Everything you never wanted to know about time.* At *FOSEDEM 2015*
15. George V. Neville-Neil. *Evolving the BSD 4.4 Network Interface Framework.* In *Communication Design Engineering Conference 1997* March 1997
16. George V. Neville-Neil. *No-Copy TCP/IP for Embedded Communication Applications.* In *Communication Design Engineering Conference 1997* March 1997
17. George V. Neville-Neil. *User Controllable Network Configuration In VxWorks.* In *Proceedings of the VxWorks Users Group Meeting* November 1995

## Workshop Publications

18. Brian Choi, George Neville-Neil, Alex Yuan, Avi Silberschatz, Peter Alvaro, Robert Soulé. Towards Automatically Extracting the Relational Model of an Operating System. In *Proceedings of The 19th International Symposium on Database Programming Languages. (DBPL '25)*, Jun. 2025. Acceptance rate: 58% (7 / 12).
19. Graeme Jenkinson, Lucian Carata, Nikilesh Balakrishnan, Thomas Bytheway, Ripduman Sohan, Robert N. M. Watson, Jonathan Anderson, Brian Kidney, Amanda Strnad, Arun Thomas, George Neville-Neil Applying Provenance in APT Monitoring and Analysis: Practical Challenges for Scalable, Efficient and Trustworthy Distributed Provenance In *9th USENIX Workshop on the Theory and Practice of Provenance (TaPP 2017)*, 2017.

## Refereed Posters and Presentations

20. Robert Soulé, George Neville-Neil, Stelios Kasouridis, Alex Yuan, Avi Silberschatz, and Peter Alvaro. OSDB: Exposing the Operating System's Inner Database. Extended abstract and presentation at the *New England Database Summit (NEDB '25)*, January 2025.
21. George V. Neville-Neil. *Systems, Science, and FreeBSD* At *Micorosft Research, Cambridge UK* August 2014

22. George V. Neville-Neil. *Synchronizing Systems on a LAN: An Introduction to PTPd* At BSDCan 2011
23. George V. Neville-Neil. *Multicast Performance in FreeBSD* At EuroBSD 2008
24. George V. Neville-Neil. *Becoming Paranoid for the Cambridge Security Seminar* At University of Cambridge Computer Laboratory, Cambridge UK 2006

### Select Technical Reports

25. George V. Neville-Neil. Issues in the Design of Continuous Media Systems In *Pegasus Project Technical Report 94-1*, 1994.
26. George V. Neville-Neil. BUENA: A protocol for Digital Audio In *Summary Report, Communications Work Package, Pegasus Project*, September 1993.

### Refereed Tutorials

2016	George V. Neville-Neil (D)Tracing FreeBSD for DevOps and Developers At EuroBSD 2016
2016	George V. Neville-Neil A Look Inside FreeBSD with DTrace At BSDCan 2016
2016	George V. Neville-Neil (D)Tracing FreeBSD for DevOps and Developers At AsiaBSDCon 2016
2015	George V. Neville-Neil A Look Inside FreeBSD with DTrace At AsiaBSDCon 2015
2010	George V. Neville-Neil Networking from the Bottom Up: IPv6 At BSDCan 2010
2009	George V. Neville-Neil Networking from the Bottom Up: Device Drivers At BSDCan 2009
2008	George V. Neville-Neil Performance Analysis with HWPMC At EuroBSD 2008
2006	George V. Neville-Neil Paranoid University Asia 2006 Tour At 8 Locations: Mumbai and Bangalore, India; Sydney, Australia; Singapore; Taipei Taiwan, Seoul, Korea; Beijing, China; Hong Kong
2005	George V. Neville-Neil Paranoid University Europe 2005 Tour At 5 Locations London, England; Paris and Grenoble, France; Munich and Hamburg, Germany
2005	George V. Neville-Neil Paranoid University Asia 2005 Tour At 7 Locations: Bangalore, India; Sydney, Australia; Singapore; Taipei Taiwan, Seoul, Korea; Beijing, China; Hong Kong
2004	George V. Neville-Neil Paranoid University Yahoo Asia Developers Conference At Beijing China
2003	George V. Neville-Neil Deploying and Debugging DHCP At LISA 2003 ( <b>LISA '03</b> .)
2003	George V. Neville-Neil Deploying and Debugging DHCP At APRICOT 2003 ( <b>APRICOT '03</b> ).
2002	George V. Neville-Neil Socket Programming At USENIX 2002 ( <b>USENIX '02</b> ).

### Select Keynote Talks

1. George V. Neville-Neil. The coming decades of BSD At *EuroBSD 2016*
2. George V. Neville-Neil. Thinking about Thinking in Code At *BSDCan 2009*
3. George V. Neville-Neil. Thinking about Thinking in Code At *EuroBSDCon 2008*

### Television Appearances

2017	CNN The Entree - Finding Security in Cyber Insecurity
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### Patents Granted

1. Wireless Device Pairing George V. Neville-Neil. Published as Global Patent WO 2020/176989 A1, September 03, 2020