CURRICULUM VITAE - to December 2017

1. Name, Position, Academic Department

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3. Education

B.S. Trinity College, Hartford, CT, 1965 (with Honors in Engineering)

B.S.E. Trinity College, Hartford, CT,1966

Sc.M. Brown University, Providence, RI, 1968

Ph.D. Brown University, Providence, RI, June 1970 - Requirements completed and certified, June 1970 – Formal awarding of degree June 1971 (Both degrees in the Division of Engineering - Electrical Sciences.)

Doctoral Dissertation(for Prof. Allan E. Pearson):
"Identification of Linear Systems Using Fast Fourier Transform Techniques"

4. Professional Appointments

September 1980- Professor of Engineering, Brown University, Providence, RI, responsible for new program in Computer Engineering. Director of LEMS Laboratory. Responsible for research programs in speech and signal processing and computer architecture. Have taught courses in digital signal processing, speech processing, communication theory, computer architecture, electrical circuits, and introduction to programming.

2013-2016 Faculty Director for EE/CE ScM Program, School of Engineering, Brown University

2012-2014 Director of Undergraduate Engineering Programs, Brown University

July 1991-June 1998 Dean of Engineering, Brown University

1988-1990 Director of Undergraduate Engineering Programs, Brown University

1976-1980 IBM, T. J. Watson Research Center, Yorktown Heights, NY, Manager of Speech Terminal Project, responsible for design and development of real-time speech I/O system.

1972-1976 IBM, T. J. Watson Research Center, Yorktown Heights, NY, Digital signal processing techniques for speech recognition. Responsible for design of speech analysis, recording, display facility.

1971-1972 IBM, T. J. Watson Research Center, Yorktown Heights, NY, Analytic methods of computer system performance.

1970-1971 IBM, T. J. Watson Research Center, Yorktown Heights, NY, Digital image processing methods as applied to earth resources satellite data.

1968 (part-time) - Consultant to the Raytheon Company Submarine Signal Division, Portsmouth, RI.

Subject: Specific Applications of FFT Techniques.

1966-1970 Teaching Assistant, Brown University, complete responsibility for the Microwave and Digital Electronics Laboratories of the Electrical Sciences Department of the Division of Engineering. Also, advisor for seven senior honors projects in digital signal processing.

1964-1966 Research Associate at the Gerber Scientific Instrument Co. (part-time and summers) Hartford, CT. Worked in the area of development of logic and control for large digital plotting systems.

5a. Completed Research: Patents

1. Brandstein, Michael and Silverman, Harvey F., **Methods and Apparatus for Adaptive Beamforming**, US Patent, 5,581,620, issued December 3,1996

2. Brandstein, Michael and Adcock and John E. and Silverman, Harvey F., **Methods and Apparatus for Source-Location Estimation from Microphone-Array Tome-Delay Estimates**, US Patent 5,737,431, issued April 7, 1998.

3. Silverman, Kenneth J.,**Electromagnetic Position and Orientation Sensing System**, US Patent 8,450,997 B2, issued May 28, 2013.

4. Patterson, William R. III and Silverman, Harvey F. and Silverman, Kenneth. J., **Electromagnetic Position and Orientation Sensing System**, US Patent 8,723,509 B2, issued May 13, 2014.

5b. Completed Research: Publications, Presentations With one or two non-major exceptions, all the listings in this section are for refereed journal and conference papers),**(label c)**, or for non-refereed Technical Reports, (both IBM and Brown),**(label d)**. As separating these in Latex is a large problem, I have left them in simple chronological order.

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[3] H. F. Silverman. An optimizing Fourier domain compaction method for ERTS data. In *Proceedings of EIA Symposium Automatic Photo Interpretation and Recognition*, Baltimore, MD, 1970.

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6. Research in Progress

Large aperture microphone-array system Sarthak Khanal Sarthak completed his PhD, defending in September 2016. He wrote a real time system for using our wired 128-microphone room system and applying it to cocktail-party data. In the process, he came up with a new way to isolate talkers and demonstrated it. He also wrote a paper with me on the new method which has been submitted to the best journal in our field. In his work he also implemented self-calibration, a new localization algorithm, basic beamforming, and the new talker-isolation and enhancement algorithm. Sarthak wrote and presented a paper at the WASPAA IEEE workshop – the most prestigious one in the field of DSP/acoustics, talking about a different new algorithm for localization in real time. Sarthak is now a member of the research staff at Apple.

Rahul Shakya completed his thesis. he first developed a new calibration procedure for out=r wireless 16 microphone array, which is by necessity, to be self-calibrating. He also developed a talker isolation algorithm that uses phase information that was a central kernel for his thesis, which he wrapped up and defended in May 2017. Rahul is currently a post-doc in my lab.

Octomic 2 I had an UTRA over the summer(Bharath Kayyar) who worked to develop software for out new Octomic 2 array. He first found that the Linx radios we were using to synchronize the speech data taken from four panels was occasionally unstable, so we rebuilt the array with wired synch. He then attempted to adapt the programs of Sarthak Khanal for the new array, but performance was not up to the level that Sarthak's system had. Work on this may progress next semester. Previously,I had a summer intern, Joshua Finley-Durso, who completed the design of an eight-microphone USB2-connected module that we call Octomic 2. Ken Silverman and I made four of the modules(32 microphones). These are currently running and I expect to be doing some programming for them in the coming months. I made out a patent disclosure for the new system, last year but have had no response from our patent department!.

The baby cry project Researchers at Women and Infants Hospital and I have received an internal Brown award of $100,000 to study the detection of infant opioid addiction from a baby's cry. The first main problem is to gather a huge amount of data. Thus, with Jessica Lai and Rahul Shakya, I designed, tested, and built 4 working units to record 12-hours of audio in a baby bassinet. Each unit is safe, no moving parts, and runs on two AA batteries for over 3 12-hour sessions. As we debug and improve function, we are starting to build more based on a third design of the PC board. One unit is at Women and Infants Hospital and we hope to have first real data soon. We also built and tested software for 'stripping' the very large files for only those times a baby is crying. We also improved the two-phase infant-cry analyzer and sent the new version to researchers at Women and Infants Hospital.

7. Service to the University and Profession

(i) University

Faculty director, admissions officer and advisor for the ESCE ScM program 2013-2018

University Grievance Committee 2012-2015

Director of Undergraduate Programs for the School of Engineering 2012-2014

Freshman advisor 2010-2015, 2017

On promotion committee for Gabriel Taubin 2011-12

Chaired Promotion Committee for Iris Bahar 2011

On faculty search for replacement for Jennifer Dworak 2010-2012

Honorary Degree recipient escort 2009

Computer Engineering concentration advisor 2008-2012

Chairman of University Honorary Degrees Committee 2008-2009

ABET coordinator for Computer Engineering 2008

Honorary degree recipient escort 2007

Computer Engineering concentration advisor 2007

Freshman Advisor 2007

Served on University Committee for Honorary Degrees (2006-8)

On faculty search Committee for Computer Engineering replacement for Jie Chen (2006)

In charge of Admissions folder reading for the Division [2005 - 6]

Faculty person for Brown Charities Drive [2004-5]

Freshman advisor 2004

Responsible for full preparation of ABET Self-Study for Computer Engineering and as liaison for Computer Engineering in November 2004 visit.

2003-2005 Serving on ACCRI, Brown's formal committee on socially-responsible investing (appointed by FEC)

Manage and run LEMS facility [1981-]

On two search committees for computer engineering hire [2003]

Freshman advisor 2003

Chair Tenure review Committee for R. Iris Bahar [2002]

Chair search committee for new Computer Engineering professor [spring 2002]

Directed a group of 12 students who worked on the Instron Simulator[2002]

Barus-Holley Lobby redesign committee [2001-2002]

Advisor for new project with Instron simulator [2000-2001]

Chair search committee for new Computer Engineering professor 2001

Advisor for new project with Instron simulator [2000-2001]

Freshman advisor [2000] and Computer Engineering concentration advisor [Fall 2000]

Chair search committee for new Computer Engineering professor [2000]

Chair search committee for new Computer Engineering professor [1999]

Chair *ad hoc* committee on rapid prototyping for the Division[1997-

Freshman advisor [1999]

New Engineering Building Committee[1997-

University Red Tape Clearance Committee [1998-2001]

Fund raising for new Brown Engineering facility.

Member of Committee on Engineering Sesquicentennial(1995-1997)

NCAA Accreditation Executive Committee and Chair of subcommittee on Governance and Compliance (1996-1997)

Average advising – 5 independent studies students/year, 12 graduate students per year.

Dean of Engineering [July 1991- June 1998]

Director of LEMS[1981-

Director of Undergraduate Programs, Division of Engineering [1988-1990]

Chairman - Search Committee for EE [1989-90]

Chairman - Search Committee for EE [1987-88]

Chairman - Search Committee for EE [1985-86]

Chairman - Search Committee for EE [1984-85]

Freshman/sophomore advisor - 2 of each three years

(ii) Profession

Refereed approximately 4 papers in 2014

Average Refereeing per Year – 3 papers

(ii) Professional Activities

Lifetime fellow IEEE 2008

Fellow IEEE

Member, Trinity College Engineering Advisory Council [1990 -]

Consultant for AT&T-Lucent on Patent Infringement suit, re. speech recognition [1998-

Chairman, Technical Committee on Digital Signal Processing [1979-83].

Member, IEEE Acoustics, Speech and Signal Processing Society, Technical Committee on Digital Signal Processing [1972-83].

General Chairman, IEEE International Conference on Acoustics, Speech and Signal Processing [1977]

Technical Advisor - Sphere Technology [1983-1985]

(iii) Community Activities

Member of Executive Committee, Trustees, Trinity College [2001-2003]

Charter Trustee, Trinity College, Hartford, CT [1994-2003]

8. Academic Awards and Grants

Academic Honors

Chosen as "Engineer of the Month" for EEweb.com, November 2016

IEEE Lifetime Fellow 2008

Appointed member of Trinity Trustees Executive Committee 2001

Citation as an "Outstanding Engineering Alumnus", Trinity College 100th Anniversary of Engineering, 1997

Elected IEEE Fellow, December 1996

Elected Charter Trustee of Trinity College, Hartford, CT (1994-1999)

Elected as a Tau Beta Pi member as an educator 1994

Nominated for 1994 Computerworld Smithsonian Award

IEEE Centennial Medal Award - 1984

IEEE ASSP Society Meritorious Service Award - 1981

IBM First Level Patent Award - 1976

IBM Outstanding Contribution Award for the MAP Acoustic Processor for continuous speech recognition - 1976

IBM Research Division Award for developmental work on Winograd Fourier Transform Algorithms - 1975

IBM Research Division Award for Sequential Similarity Detection Algorithms -1973

Grants and Contracts

Current, Pending

2017 $10,000 unrestricted, zero overhead gift from the JANCI Foundation received to support two summer students.

2017 $8000 Private donations to LEMS

2017 $3000 Boards and component parts given to Brown from Analog Devices

Completed Awarded Funding

2016 $25,000 unrestricted, zero overhead gift from the JANCI Foundation received to support two summer students.

2016 $8000 Private donations to LEMS

2016 $5000 Boards and component parts given to Brown from Analog Devices

2015 $50,000 unrestricted, zero overhead gift from the Janci Foundation received to support my research into microphone array controlled video teleconferencing.

2015 $35,000 LEMS affiliate award from Analog Devices

2015 $10000 Private donations to LEMS

2015 $5000 Boards and component parts given to Brown from Analog Devices

2014 $50,000 unrestricted, zero overhead gift from the Janci Foundation received to support my research into microphone array controlled

2014 $35,000 LEMS affiliate award from Analog Devices

2014 $10000 Private donations to LEMS

2014 $5000 Boards and component parts given to Brown from Analog Devices

2013 $50,000 unrestricted, zero overhead gift from the Janci Foundation received to support my research into microphone array controlled

2013 $35,000 LEMS affiliate award from Analog Devices

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2012 $50,000 unrestricted, zero overhead gift from the Janci Foundation received to support my research into microphone array controlled

2012 $35,000 LEMS affiliate award from Analog Devices

2012 $10000 Private donations to LEMS

2012 $5000 Boards and component parts given to Brown from Analog Devices

October 2009-2011 ($187,805) NIH Grant for two years through Women and Infants Hospital:"Early Detection of Autism through Acoustic Analysis of Cry"

2010 $45,000 unrestricted, zero overhead gift from the Janci Foundation received to support my research into microphone array controlled video teleconferencing.

2010 $35,000 LEMS affiliate interface for Analog Devices

2009 $15,600 award for summer student and lab components support for my program from Michael Kourey, Polycom.

2009 $50,000 unrestricted, zero overhead gift from the Janci Foundation received to support my research into microphone array controlled video teleconferencing.

2009 $35,000 LEMS affiliate interface for Analog Devices

2008 $15,600 award for summer student and lab components support for my program from Michael Kourey, Polycom.

2008 $50,000 unrestricted, zero overhead gift from the Janci Foundation received to support my research into microphone array controlled video teleconferencing.

2008 $35,000 LEMS affiliate interface for Analog Devices

2007 $30,000 contract with Microsoft for 3D mouse system

2007 $50,000 unrestricted, zero overhead gift from the Janci Foundation received to support my research into microphone array controlled video teleconferencing.

2007 $35,000 LEMS affiliate interface for Analog Devices

2006 $50,000 unrestricted, zero overhead gift from the Janci Foundation received to support my research into microphone array controlled video teleconferencing.

2006 LEMS affiliate interface for Analog Devices $35,000

2005 $50,000 unrestricted, zero overhead gift from the Janci Foundation received to support my research into microphone array controlled video teleconferencing.

2005 LEMS affiliate interface for Analog Devices $35,000

2004 $50,000 unrestricted, zero overhead gift from the Janci Foundation received to support my research into microphone array controlled video teleconferencing.

2004 LEMS affiliate interface for Analog Devices $35,000 [2003]

2004 License fees and royalties from Microphone Array patents from Acoustic Magic $10,000.

Unrestricted $25,000 grant [2003] (with Iris Bahar) from Microsoft to support summer students and research on the talking android head. item $35,000 [2002] unrestricted, zero overhead gift from the Janci Foundation received to support my research into microphone array controlled video teleconferencing.

2003 $25,000 unrestricted, zero overhead gift from the Janci Foundation received to support my research into microphone array controlled video teleconferencing.

LEMS affiliate interface for Analog Devices $35,000 [2003]

License fees and royalties from Microphone Array patents from Acoustic Magic[2003] $7,000.

Unrestricted $25,000 grant [2003] (with Iris Bahar) from Microsoft to support summer students and research on the talking android head. item $35,000 [2002] unrestricted, zero overhead gift from the Janci Foundation received to support my research into microphone array controlled video teleconferencing.

$5000 [2002] gift from Santo Politi of Charles River Associates to support a summer student.

License fees and royalties from Microphone Array patents released in 2002 of an additional $40,000.

$50,000 unrestricted, zero overhead gift from the Janci Foundation received to support my research into microphone array controlled video teleconferencing.

LEMS affiliate interface for Analog Devices $35,000 [2001]

License fees and royalties from Microphone Array patents released in 2001 of an additional $450,124.

$100,000 unrestricted, zero overhead gift from the Janci Foundation received to support my research into Microphone Arrays for Speech Recognition

LEMS affiliate interface for GTECH - $35,000 [1998-2000]

LEMS affiliate interface for Analog Devices $35,000 [1995-2000]

License fees and royalties from Microphone Array patents have generated about $1,250,000 over 1998-2000, with about $200,000 going to support my research, about $200,000 each going to Divisional and LEMS endowments.

NSF Grant for Parallel Architectures for Speech Recognition approx. $300,000 [1995-1998]

NSF Teaching Equipment Grant for $81,000 for undergraduate workstations [1995-1997]

CRASP/DARPA grant for $50,000 [1996]

Experimental Systems NSF grant (with James Flanagan of Rutgers) for building large microphone array - approx. $ 1,000,000 [1994-1996].

DARPA grant with David Cooper for Target Recognition approx. $350,000 [1993-1995]

NSF Grant for Parallel Architectures for Speech Recognition approx. $300,000 [1992-1994]

NSF Grant (with S. Ghosh) on Reconfigurable Computing approx $170,000 [1991-1992]

NSF/DARPA Grant on Microphone Array Technology approx $300,000 [1989-1991]

NSF Grant for Parallel Architectures for Speech Recognition approx $350,000 [1989-1991]

NSF Grant for Parallel Architectures for Speech Recognition approx $566,000 [1986-1988]

NSF Grant for Parallel Architectures for Speech Recognition approx $400,000 [1982-1985]

ARO (DOD) Equipment Grant (with D. B. Cooper) approx $122,000 [1983]

NSF Equipment Grant (with D. C. A. Bulterman) approx $108,000 [1982]

Hewlett-Packard Equipment Grant $500,000 [1989]

BERTEX Interface for Division:$5000 each from A.T. Cross[1992], Schroff[1992-95], Hasbro[1992-94],Telco/Metrabyte[1993-95],American Power Conversion [1993-95], Gtech[1992-95], Cookson America [1992-95],NUWC[1993-95], Narragansett Electric[1994-95], Astro Med[1994-95], Augat[1995], Texas Instruments[1996], Gorham[1996]

LEMS affiliate interface for Polycom - $25,000 [1998]

LEMS affiliate interface for VTEL - $35,000/year [1994-96]

LEMS Affiliate interface for GTECH - $18,000/year [1987-1989] $36,000/year [1990-1994]

LEMS Affiliate interface for Sanders Associates - $30,000/year [1984-1991], $20,000 [1992], $10,000 [1993], $20,000[1994-95]

LEMS Affiliate interface for Bellcore - $30,000/year [1990-1991] $15,000 [1992]

LEMS Affiliate interface for AT&T - $30,000/year [1984-1985] $35,000/year [1987-]

LEMS Fellowship sponsored by Metrabyte $15,000 [1992]

LEMS Affiliate interface for AMP - $30,000/year [1984-1988] $35,000/year [1991]

LEMS Affiliate interface for US West - $35,000/year [1988]

Analog Devices Grant for Student Research Projects Program and Affiliation $175,000 [1988-1992] (only $105,000 received).

Analog Devices grant for Advasnced Grad Student/Post-Doc Support $125,000 [1988-1992] (only $75,000 received).

Analog Devices Grant (with D. B. Cooper) $150,000 [1982-87]

IBM Fellowships 3 years - $60,000 (J. T. Rayfield) [1984-1987]

LEMS Affiliate interface for Augat - $30,000/year [1984-1988] ($60,000 cash, and $60,000 parts and services)

LEMS Affiliate interface for IBM - $25,000/year [1984 - 1985]

IBM New Research Grant, $75,000 [1981-84]

GLAK Grant, $5,000 [1982]

Gould, Inc. (with D. C. A. Bulterman), $15,000 [1984]

Tektronix Matching Grant $15,000 [1985].

Equipment donations from Motorola, National Semiconductor, TI, Monolithic Memories, Augat, AT&T, Schroff, AMD, Viewlogic, Xilinx.

9. Teaching

Support of Teaching Programs

- Worked with Bill Patterson to further develop printed-circuit board facilities to be used in several EE and CE courses.
- Large update and revision of the laboratories for ENGN0520 which I had developed a few years ago.

Last Three Years

- 2017
  - (Fall) ENGN2530 – Digital Signal Processing – 21 students (100% of course)
  - (Fall) ENGN1650 – Embedded Microprocessor Systems – 1 student – 30% of course
  - (Spring) ENGN0520 – Electrical Circuits – 84 students 50% of course and updated LABs
  - (Fall/Spring) EN197/198 Independent studies students directed – 2
- 2016
  - (Fall) ENGN2530 – Digital Signal Processing – 9 students (100% of course)
  - (Fall) ENGN1650 – Embedded Microprocessor Systems – 2 students – 30% of course
  - (Spring) ENGN0520 – Electrical Circuits – 82 students 50% of course and updated LABs
  - (Spring) Undergraduate Honors Theses directed and completed - 2
  - (Fall/Spring) EN197/198 Independent studies students directed – 2
- 2015
  - (Fall) ENGN2530 – Digital Signal Processing – 17 students (100% of course)
  - (Fall) ENGN1650 – Embedded Microprocessor Systems – 6 students – 30% of course
  - (Spring) ENGN2540 – Speech Processing – 3 students 100% of course and updated MATLAB exercises
  - (Spring) Undergraduate Honors Theses directed and completed - 1
  - (Fall/Spring) EN197/198 Independent studies students directed – 4
- 2014
  - (Fall) ENGN2530 – Digital Signal Processing – 15 students (100% of course)
  - (Fall) ENGN1650 – Embedded Microprocessor Systems – 9 students – 30% of course
  - (Spring) ENGN0520 – Electrical Circuits – 104 students Directed course and split work with Professor Gabriel Taubin. Spent much time revising labs and integrating them into the course (feedback from students was terrific!)
  - (Spring) Undergraduate Honors Theses directed and completed - 0
  - (Fall/Spring) EN195/196 Independent studies students directed – 2
- 2013
  - (Fall) ENGN2530 – Digital Signal Processing – 7 students (100% of course)

- (Fall) ENGN1650 – Embedded Microprocessor Systems – 5 students – 30% of course
- (Spring) ENGN0520 – Electrical Circuits – 79 students Directed course and split work with Professor Sean Deoni. Spent much time revising labs and integrating them into the course (feedback from students was terrific!)
- (Spring) Undergraduate Honors Theses directed and completed - 1
- (Fall/Spring) EN195/196 Independent studies students directed – 2
- (Summer) Two UTRA students

- 2012
  - (Fall) ENGN2530 – Digital Signal Processing – 9 students (100% of course)
  - (Fall) ENGN1650 – Embedded Microprocessor Systems – 10 students – 30% of course
  - (Spring) ENGN2540 – Speech Processing – 12 students 100% of course and updated MATLAB exercises
  - (Spring) Undergraduate Honors Theses directed and completed - 1
  - (Fall/Spring) EN195/196 Independent studies students directed – 2

Summary of Courses Taught

I have been doing at least 2.5 assignments for each of the last three years.

Engineering ENGN1650, formerly 193-S09 Embedded Microprocessor Systems Design[2003,in part, 2005,2006,2007,2008,2009,2010,2011,2012,2013,2014,2015,2016,2017] 1-17 students(17 students in 2010, 10 in 2012, 5 in 2013, 9 in 2014, 6 in 2015, 2 in 2016, 1 in 2017)

Engineering 2530 Digital Signal Processing [1980 - 1985, 1987-1991,1993,1994,1997,1999-2002,2004-2017] (average = 15 students, 21 in 2017, 11 in 2016 including two who dropped at the end)

ENGN0520 formerly EN52 Circuit Theory and Optics [1986,1991,1999,2000,2001,2003,2004,2005,2006,20 2011, 2013,2014,2016,2017] (average = 85 students)

Engineering 164 Computer Systems and Architecture [1981-82, 1988,1990] (average = 75 students)

ENGN2540 formerly EN254(292A) Speech and Audio Processing [1983,1985,1989,1991,1993,1996,1998,20 (average = 7-10 students, 3 in 2015)

Engineering 10 Engineering Programming [1983] - 170 students

Engineering 158 Communication Theory [1984,1985] (average = 40 students)

Engineering 195/196 Independent Studies 1980–present Average 6 Independent Studies student-semesters per year; Average of 2 Completed Honors' Theses (1980-present)

Honors Students receiving NSF Fellowships

Michael Brandstein - 1988

Henry Chang - 1989

PhD's Awarded

Rahul Shakya [2017]

Sarthak Khanal [2017]

Xiaoxue Li [2016]

Brian Reggiannini[2012]

Avram Levi[2012]

Hoang Do[2011]

Ying Yu[2007]

Joshua Sachar[2004]

Tadd Hughes[2001]

John Adcock[2001]

Joseph Dibiase[2000]

Paul Meuse[2000]

Douglas Sturim[1999]

Stuart Kirtman[1998]

Aaron Smith [1998]

Daniel Mashao [1996]

Yoshihiko Gotoh [1996]

Michael Wazlowski [1996]

Michael Brandstein [1995]

Jonathan Foote [1994]

Michael Hochberg [1993]

Peter Athanas [1992]

Les Niles [1991]

Krishna Nathan [1991]

Victor Alvarado [1990]

James Rayfield [1988]

Susan Miller [1988]

David Morgan [1988]

Yi Teh Lee [1988]

Masters' Degrees Awarded

As advisor to all the ESCE ScM students for the past three years, there are about 18 per year for this.

Kai Zhang [2015]

Rahul Shakya [2013]

Sarthak Khanal [2013]

Zachary Kelton [2010]

Brian Reggiannini [2009]

Alex Boeglin[2008]

Daniel Casimiro[2007]

Hoang Do[2007]

Avram Levi[2007]

Matthew Gillette[2007]

Michael Herman[2005]

Sheldon Provost[2004]

Ying Yu[2003]

Matthew Sousa[2002]

Joshua Sachar[2000]

Michael Snyder [1999]

Hyun Kyu Yun [1997]

Hong-Seok Kim [1997]

James Kessler[1996]

Laurie Chapman[1994]

Mark Rapaport [1993]

John Adcock [1993]

Joseph DiBiase [1993]

Michael Wazlowski [1992]

Yoshihiko Gotoh [1991]

Michael Blaine [1990]

Michael Curran [1990]

Gregory Leeming [1989]

Michael Hochberg [1989]

Hamid Wasti [1989]

Tracey Jones [1988]

Michael Karam [1987]

Elizabeth Wilson [1986]

James Rayfield [1985]

Susan Miller [1985]

David Morgan [1985]

Esther Ovadia [1985]

Wendy Kessler [1984]

Jay Rubinstein [1983]

Larry Lewis [1983]

Zwei Amitai [1983]

Les Niles [1983]

Carolyn Vickroy [1982]

David Hackman [1982]

Dominic Dominijanni [1982]

Recent Undergraduate Honors Theses

Jacques van Anh [2016]

Min Ye Teh [2016]

Gaurav Nakhari [2015]

Elliot Creager [2013]

Chaolun Song [2012]

Christopher Moynihan[2011]

Ben Zhang[2010]

Ryan Cochran[2008]

Kenji Tagaya[2008]

Brian Reggiannini[2007]

Yoshiro Fujita[2006]

Sarah Kline[2005]

Brendan Schwartz [2005]

Jacob Rosenstein [2005]

Evan Metcalfe [2003]

George Roberts[2003]

Noel Eisley [2002]

Kevin Wu [2002]

Current PhD Graduate Students

Current ScM Thesis Graduate Students

Current Undergraduate Independent Studies/Honors Students

Joshua Durso-Finley

10. Date of Preparation of CV

January 3, 2018