NANETTE VEILLEUX, Ph.D
Simmons College
300 The Fenway   **617-521-2705**
Boston, MA 02139   **veilleux@simmons.edu**

Professional Preparation

Ph.D.   Boston University, Boston, MA.   Systems Engineering. May 1994
Thesis: Computational Models of the Prosody/Syntax Mapping for Spoken Language Systems.
 Thesis committee: M. Ostendorf (advisor), C. Espy-Wilson, M. Meteer, S. Shattuck-Hufnagel.

M.S.E.E.   Boston University, Boston, MA.   Electrical Engineering, May 1988
Masters Project: Waveform Modification with a Sinusoidal Model.   Advisor: M. Ostendorf

Sc.B.   Brown University, Providence, RI   Biophysics. May 1979
Senior Thesis: Clinical Exposure in Radiation Oncology Patients.   Advisor: C. Orton

Primary Academic Appointments:

Division Director Mathematics, Computing and Statistics Division College of Computational, Organizational and Information Sciences	2017-2020
Professor and Chair Computer Science and Informatics Program, Simmons University, Boston MA Associate Dean for Research School of Library and Information Sciences, Simmons College	2010-present (Chair: 2014-2020, Professor: 2014-present Associate: 2006-2014, Assistant:1999-2006) 2014-2017
Research Affiliate Research Lab of Electronics (RLE) Massachusetts Institute of Technology,	1999-present
Visiting Professor, Fulbright Scholar Computer Engineering Department Kilgali Institute of Science and Technology (KIST, now University of Rwanda, Kilgali),	Fall 2013
Director of Graduate Admissions, Instructor Boston University Metropolitan College	1994-1999

Courses taught at Simmons College: Computer Sciences standard programming courses (routinely, CS1 using Python, GUI Programming with Java, Data Structures, Computer Language Theory, Database Design and Implementation; less often, Algorithms, Object Oriented Design (Software Engineering)), special topics (Humanitarian Open Source Software) as well as service courses: Media and the Message (Simmons World Challenge Intercession course, twice) and the Multidisciplinary Core Course (First Year Seminar). In addition, I mentor 3-7 Simmons undergraduates in independent studies and research experiences each semester.

Courses taught Elsewhere:

Kilgali Institute of Science and Technology (2013), Signals and Systems, Object-Oriented Programs
Boston University (1993-2004): Signals and Systems, CS1 using C++, Data Structures, Discrete Math, Calculus, Speech and Natural Language Processing (Graduate Course)

Awards:

Dean's Award for Excellence in Teaching, Simmons College, 2004
Fulbright U.S. Scholar Award, Rwanda, 2013
Provost's Diversity and Inclusion Fund (Intergroup Dialogues), 2011-12
Simmons Nomination for US Professor of the Year, 2015
President's Fund for Excellence ($10000 award), 2016
Toby Sloane Award for Excellence in Teaching ($10000 award), 2017
Fulbright U.S. Scholar Award, Vietnam, 2021-22
2022 IEEE Computer Society Mary Kenneth Keller Computer Science and Engineering Undergraduate Teaching Award (internally announced in February 2022)

Recent Externally Funded Projects and Collaborations:

- Fulbright United States Scholar, teaching position at Fulbright University, Ho Chi Minh City, Vietnam, February –June 2022.
- "Exploring Variation in English Intonational Acoustic Phonetics from Grammatical Perspectives", National Science Foundation, with Ahn, B. (Princeton), Shattuck-Hufnagel, S. (MIT) and Brugos, A. (Simmons), $150,000 to Simmons. 2021-2023.
- Howard Hughes Medical Institute: Inclusive Excellence, IE3 Learning Community Update: awarded collaboratively across Simmons STEM disciplines (about $30K to Simmons with opportunities to apply for continuing funds).
- "Remote Participation at Scientific Conferences", National Science Foundation EAGER grant, $25000 to Boston University (Speech Prosody 2016 Conference host, PI: Jon Barnes), 2016.
- "Connection, Community, and Engagement in STEM Education (Large Empirical, Contextual Research Topics in STEM Education)", with Wilson, D., (University of Washington), Bates, R., (Minnesota State, Mankato), Plett, M., (Seattle Pacific), Floyd-Smith, T., (Tuskegee University). $1M grant, $200000 to Simmons, 2010-2016
- "Collaborative Research: Integrating shape, scaling, and alignment in a global approach to F0 events in intonation systems", National Science Foundation funded project with Jon Barnes (Boston University) and Shattuck-Hufnagel, S., (Massachusetts Institute of Technology), $33,600 to Simmons, 2012- 2014
- Fulbright United States Scholar, teaching position at Kigali Institute of Science and Technology, Rwanda, September –December 2013.
- "Colleges of the Fenway STEM Scholars", National Science Foundation funded collaboration to provide scholarships to STEM majors (4-6 Simmons students) ($586,262, 2010-2013).
- "Collaborative Research: Global Measures of Tonal Alignment in a Level-based Theory of Intonational Phonology", National Science Foundation, Collaboration with Jon Barnes (Boston University) and Shattuck-Hufnagel, S., (Massachusetts Institute of Technology), $52,596 to Simmons College, 2008-10
- Collaborative Research Experience for Undergraduates grants, as faculty mentor:

- 2012- 2018 Collaborative Research Experience for Undergraduates (CREU) grants, $6000-$1000, 2-3 students each academic year from AY 12/13 – AY 18-19
- 2007 Multidisciplinary Research Opportunity, Women, $8000, 2 students. AY 07/08
- 2006 Collaborative Research Award for Women, $4000 for 2 students, AY 06/07

- Simmons Grants for Undergraduate Research, (past 5 years) as faculty mentor
  - 2017, SURPASs, to Pam Qian
  - 2017-18, Hazel Lenard Dix grant to Sherry Siebel,
  - 2020, Passionate Leaders grant to Rachel Beaulieu.
  - 2020-2021, Undergraduate Fellows Program to Ismah Ahmed and Samin Charepoo
  - 2021-2022, Undergraduate Fellows Program to Nardos Alemu and Melat Ali
  - 2021, SURPASs, to Tabitha Miles

Selected Administrative Service:
Simmons College of Arts and Sciences
- Curriculum Committee, College of Arts and Science, 2003-2012, Chair 2006-2011
- Assessment Committee, College of Arts and Science, 2006-2014, Chair 2011-2013
- Faculty Senate, Simmons College, 2011-2013
- Director of the Multidisciplinary Core Course (first year seminar incorporating writing instruction and exploration of diversity and inclusion), 2010-2013

Simmons School of Library and Information Sciences
- Associate Dean for Research, School of Library and Information Science, 2014-2018
- Director of the Information Science and Technology Concentration, Master in Science, Library and Information Sciences Program, 2016-2018
- Dean's Advisory Board on Diversity and Inclusion, 2015-2018

Service to the Profession
Workshops/ Meetings or Symposia Organized:
- Speech Prosody 2016, May 31-June 3, 2016, Biannual International Meeting of Speech Scientists interested in Prosody, Local organizer, Attendance: 335.
- Intergroup Dialogs (IGD) Training, Simmons College, May 2011, Organized training for Simmons staff and faculty in Intergroup Dialogs, a multicultural dialog pedagogy, Attendance: 25
- ToBI Workshop on Spontaneous Speech. Simmons College, August 2004. Speech Scientists met for in depth discussion of the state of the ToBI transcription system. Product: MIT Opencourseware tutorial. Attendance: 40.

Selected Reviews and Panels
- Reviewer for Computer, Speech and Language Journal(2018-present)
- Reviewer for Journal of Student Research (2020-present)
- Reviewer for International Journal of STEM Education (2020-present)
- Reviewer for Frontiers in Education Journals (2020-present)
- Conference submission Reviewer for ISCA Speech Prosody Conference (2008-present), Interspeech Conferences (2011-present), Experimental and Theoretical Advances in Prosody (2016-present), ACM Special Interest Group on Computer Science Education conferences (2011-present)

- Review Panelist for the National Science Foundation, 2014,2015, 2016, 2018, 2019, 2020
- Solicited Review Panelist: Research Grants Portfolio (Portefeuille des subventions de recherche) Social Sciences and Humanities Research Council (Conseil de recherches en sciences humaines), Canada, 2021
- Review Panelist for East Africa Fulbright Scholars Program, 2014-2016
- Reader (grader) for Computer Science AP exam: 2006-2007, 2009-2017, 2020

Memberships:
International Speech Communication Association (ISCA), Association of Computing Machinery (ACM), National Coalition for Women in Technology, Institutional Member (NCWIT), American Society for Engineering Education

Community Service:
- Transition House Board, Chair 1995-98, 2000-05, Advisory Committee, 2017-present
- Girls Get Connected Collaborative: Board member 2006-2009,
- Secondary school workshops: Sonia K Math Day, Simmons College. Spring 2005, 2006, 2010, 2011, TechSavvy workshop for Boston teens, July 26, 2012, Strong Women, Strong Girls, February 2016, She's the First presentation on Rwandan STEM education, February 2014, Science Club for Girls, Twine weeklong workshop, July 2017

Selected Recent Journals and Book Chapters (peer reviewed)
- Barnes, J., Brugos, A., Shattuck-Hufnagel, S. and Veilleux, N. , "On (and off) ramps in intonational phonology: Rises, Falls, and the Tonal Center of Gravity", Journal of Phonetics, in revision, August 2020.
- Allendoerfer, C., Veilleux, N., Floyd-Smith, T., Plett, M., Wilson, D., Bates, R., & Jones, D. C. (2019). Supporting students through faculty-student interactions: One high-engagement strategic approach. Journal on Excellence in College Teaching, 30(2).
- Wilson, D., Jones, D., Bocell, F., Crawford, J., Kim, M. J., Veilleux, N., Floyd-Smith, T., Bates, R. and Plett, M. (2015). Belonging and Academic Engagement Among Undergraduate STEM Students: A Multi-institutional Study. Research in Higher Education, 56(7), 750-776.
- Wilson, D., Jones, D., Kim, M. J., Allendoerfer, C., Bates, R., Crawford, J., Floyd-Smith, T., Plett, M. and Veilleux, N. (2014). The Link between Cocurricular Activities and Academic Engagement in Engineering Education. Journal of Engineering Education, 103(4), 625-651.
- Allendoerfer, C., Wilson, D., Bates, R., Crawford, J., Jones, D., Floyd-Smith, T., Plett, M., Scott, E., Veilleux, N. and Bates, R. (2012). Strategic pathways for success: The influence of outside community on academic engagement. Journal of Engineering Education, 101(3), 512-538.
- Allendoerfer, C., D. Wilson, R. Bates, J. Crawford, D. Jones, T. Floyd, Veilleux, N., (2012) "Strategic pathways for success: From social & extracurricular activity to academic engagement," *J. Engineering Education.*
- Barnes, J., Brugos, A., Shattuck-Hufnagel, S. and Veilleux, N. (2012) On the nature of perceptual differences between accentual peaks and plateaux. *In Oliver Niebuhr & Hartmut Pfitzinger (eds.), Prosodies: Context, Function, Communication. Berlin/New York: Mouton de Gruyter.*
- Barnes, J., Veilleux, N., Brugos, A. and Shattuck-Hufnagel, S. (2010). "Tonal Center of Gravity: A global approach to tonal implementation in a level-based intonational phonology." *Laboratory Phonology.*

- Shue, Yen-Liang, Shattuck-Hufnagel, S., Markus Iseli, Sun-Ah Jun, Veilleux, N. and Alwan A. (2010) "On the acoustic correlates of high and low nuclear pitch accents in American English", Speech Communication. 52 (2): 106-122.
- Barnes, J., Veilleux, N., Brugos, A. and Shattuck-Hufnagel, S. (2010) "Turning points, tonal targets, and the English L- phrase accent", Language and Cognitive Processes, Volume 25, Issue 7-9, 2010

Selected Recent Conference Presentations with Proceedings, peer reviewed
- Barnes, J, Brugos, A, Veilleux, N, Shattuck-Hufnagel, S., "How prosodic prominence influences fricative spectra in English", Proceedings of Speech Prosody 2020
- Brugos, A., Langston, A., Shattuck-Hufnagel, S., Veilleux, N., (2019) "A Cue-Based Approach to Prosodic Disfluency Annotation", *ICPhS*, Melbourne, Australia.
- Ahn, B., Veilleux, N., Shattuck-Hufnagel, S., (2019) "Annotating Prosody with PoLaR", *ICPhS*.
- Barnes, J., Veilleux, N., Brugos, A., Shattuck-Hufnagel, S., (2019) The Interaction of Timing and Scaling in a Lexical Tone System: An Example from Shilluk, *ICPhS*, Melbourne, Australia.
- Allendoerfer, C., Veilleux, N., Floyd-Smith, T., Plett, M., Wilson, D., Bates, R., & Jones, D. C. (2019). Supporting students through faculty-student interactions: One high-engagement strategic approach. Journal on Excellence in College Teaching, 30(2).
- Barnes, J., Veilleux, N., Brugos, A. and Shattuck-Hufnagel, S. (2018). "The interaction of timing and scaling in the Shilluk lexical tone system." Paper presented at ETAP4, Amherst, MA, USA
- Ahn, B., Shattuck-Hufnagel, S., Veilleux, N. (2018) "PoLaR Annotation Conventions: A Tool for Annotating Prosodic Variation", Paper presented at ETAP4, Amherst, MA, USA.
- Brugos, A., Breen, M., Veilleux, N., Barnes, J. & Shattuck-Hufnagel, S. (2018) "Cue-based annotation and analysis of prosodic boundary events." Speech Prosody 2018, Poznan, Poland.
- Ahn, B., Shattuck-Hufnagel, S., Veilleux, N. (2016) Evidence and Intonational Contours: An Experimental Approach to Meaning in Intonation. Proceedings of the Speech Science and Technology, 16th Australasian International Conference, Parramatta, Australia, December, 2016
- Barnes, J., Brugos, A., Veilleux, N. and Shattuck-Hufnagel,S. (2015) "Perception of Pseudo-swedish tonal contrasts by native speakers of American English: Implications for models of intonation perception." Proceedings of the *ICPhS* 18. Glasgow, UK
- Wilson, D.M., Allendoerfer, C., Bates, R., Floyd-Smith, T., Plett, M. and Veilleux, N. (2015). Go Team! The Role of the Study Group in Academic Success. ASEE Proceedings.
- Wilson, D.M., Allendoerfer, C., Bates, R., Floyd-Smith, T., Plett, M. and Veilleux, N. (2015). How Engineering Students Study: Alone, Start Together, or Start Alone, End Together. Proceedings of the American Society of Engineering Education Conference, June 2015.
- Wilson, D.M., Jones, D., Bates, R., Floyd-Smith, T., Plett, M. and Veilleux, N. (2015). Sometimes Faculty Matter: The Contribution of Faculty Support to Future Engagement, ASEE Proceedings
- Plett, M., Wilson, D.M., Bates, R., Allendoerfer, C., Carlson-Jones, D., Floyd-Smith, T., Veilleux, N. and Hawkinson-Wasilewski, C.(2014). People Matter: The Role of Peers and Faculty in Students' Academic Engagement. ASEE Proceedings.
- Barnes, J., Brugos, A., Nanette Veilleux, N. and Shattuck Hufnagel, S. (2014) "Segmental Influences on the Perception of Pitch Accent Scaling in English." In Proceedings of Speech Prosody 7, Campbell, Gibbon, and Hirst (eds.), pp. 1125-1129.
- Wilson, D., Allendoerfer, C., Kim, M.J., Burpee, E., Bates, R., Floyd-Smith, T., Plett, M. and Veilleux, N. (2013). STEM Students outside the Classroom: The Role of the Institution in Defining Extracurricular Activity. ASEE Proceedings.

- Veilleux, N., Bates, R., Allendoerfer, C., Jones, D., Crawford, J. and Floyd-Smith, T. (2013): "The relationship between belonging and ability in computer science". Proceedings of the Special Interest Group on Computer Science Education 2013: 65-70
- Veilleux, N., Barnes, J., Brugos, A., Shattuck-Hufnagel, S. (2012) Perceptual Foundations for Naturalistic Variability in the Prosody of Synthetic Speech. Proceedings of Interspeech 2012
- Barnes, J., Brugos, A., Veilleux, N., & Shattuck-Hufnagel, S.(2011). Voiceless Intervals and Perceptual Completion in F0 Contours: Evidence from Scaling Perception in American English. Proceedings of the International Conference of Phonetic Science *ICPhS 17*, Hong Kong.
- Barnes, J., Veilleux, N., Brugos, A. and Shattuck-Hufnagel, S. (2010) The effect of global F0 contour shape on the perception of tonal timing contrasts in American English intonation. Proceedings of Speech Prosody 6, Chicago, IL, May 2010.
- Veilleux, N., Shattuck-Hufnagel, S., (2008) "Automatic Detection of the Context of Acoustic Landmark Deletion", Proceedings of the International Conference on Spoken Language Processing, Brisbane, Australia, September 2008.
- Shue, Y-L., Shattuck-Hufnagel, S., Markus Iseli, Sun-Ah Jun, Veilleux, N., Alwan, A. (2008) "Effects of Intonational Phrase Boundaries on Pitch-Accented Syllables in American English", Proceedings of the International Conference on Spoken Language Processing, Brisbane, Australia, September 2008. (Best Student Paper Award for Shue)
- Brugos, A., Veilleux, N., Breen, M. Shattuck-Hufnagel, S, (2008) "The Alternatives (Alt) Tier for ToBI: Advantages of Capturing Prosodic Ambiguity ", Proceedings of Speech Prosody 4, Campinos, Brazil, May 6, 2008.
- Shue, Y-L, Iseli, M., Veilleux, N., Shattuck-Hufnagel, S. and Alwan, A., (2007) "Pitch Accent versus Lexical Stress: Quantifying Acoustic Measures Related to the Voice Source Proceedings of the International Congress on Phonetic Science, Saarbrucken, Germany, August 2007.
- Veilleux, N., Brugos, A., Shattuck-Hufnagel, S., Patterson, A., (2007) "Distribution of Disfluencies and Errors in English Discourse", Proceedings of the International Congress on Phonetic Science, Saarbrucken, Germany, August 2007.
- Shattuck-Hufnagel, S. and Veilleux, N., (2007) "Robustness of acoustic landmarks in spontaneously-spoken American English", Proceedings of ICPhS.
- Barnes, J., Shattuck-Hufnagel, S., Brugos, A. and Veilleux, N., (2006) "The domain of realization of the L- phrase tone in American English", in the Proceedings of Speech Prosody 3, Dresden.
- "Gesture marking of disfluencies in spontaneous speech", Yasinnik, Y., Shattuck-Hufnagel, S. and Veilleux, N. Proceedings of DiSS'05, Disfluency in Spontaneous Speech Workshop, September 2005..

Online Resources authored
- Ahn, B., Shattuck-Hufnagel, S. and Veilleux, N. (2019) PoLaR Annotation Conventions: A Tool for Annotating Prosodic Variation. V.09
- Veilleux, N., Shattuck-Hufnagel, S., Brugos, A., ToBI for Prosodic Transcription of American English, MIT Opencourseware 6.911, 2006. (Approximately 1000 hits/year), under revision.

Selected Recent Presentations without Proceedings, peer reviewed
- Barnes, J., Brugos, A., Veilleux, N., and Shattuck-Hufnagel, S*.,* "Spectral balance and phantom pitch in intonational pitch perception", LabPhon17, July 7, 2020
- Barnes, J., Veilleux, N., Brugos, A. and Shattuck-Hufnagel, S,. "The interaction of timing and scaling in the Shilluk lexical tone system." presented at ETAP4, Amherst, MA, October, 2018.

- Barnes, J., Veilleux, N., Brugos, A. and Shattuck-Hufnagel, S., 2015) "Modelling the perception of English F0 scaling in a segmental context", presented at ETAP3, Illinois, May 2015.
- Veilleux, N., Lerner, B., Herbst, J., Andrews , C. (2015) "Panel: Lessons from Women's College: What works, what doesn't and what will work elsewhere.", Consortium for Computing Sciences in Colleges, Northeastern Region, Worcester, MA, April 2015.
- Barnes, J., Veilleux, N., Brugos, A. and Shattuck-Hufnagel, S (2011), "Modelling the perception of English F0 scaling in a segmental context" presented at the workshop on Experimental and Theoretical Applications of Prosody, Montreal, September 23-25, 2011.
- Barnes, J., Veilleux, N., Brugos, A. and Shattuck-Hufnagel, S. (2008), "(At Least) Two Members of the Rise-Fall-Rise Family ", presented at the workshop on Experimental and Theoretical Applications of Prosody, Cornell University, Ithaca, New York. April 15-18, 2008.
- Veilleux, N., Bates, R., Allendoerfer, C., Jones, D., Joy Crawford, Wilson, D., Plett, M., Peter, D., Floyd-Smith, T., "The Role of Belonging in Engagement, Retention and Persistence in Computer Science", presented at SIGCSE (Computer Science Education) 2012, Raleigh, NC.
- Barnes, J., Brugos, A., Veilleux, N. and Shattuck-Hufnagel, S. 2011. Modelling the perception of English F0 scaling in a segmental context. ETAP 2, Montreal, Canada.
- Veilleux, N., Bates, R., Allendoerfer, C., Jones, D., Crawford, J., Wilson, D., Plett, M., Peters, D. and Floyd-Smith, T., "The Role of Belonging in Engagement, Retention and Persistence in Computer Science", SIGCSE (Computer Science Education) Conference: Raleigh, NC, 2012
- Yasuhara, K., Wilson, D., Bates, R., Floyd-Smith, T., Veilleux, N., Plett, M. and Ryan Campbell, "Student Connections to Community in Computer Science and Engineering Education," SIGCSE (Computer Science Education) Conference: Milwaukee, Wisconsin, March 2010.