**G. Michael Poor**

Department of Computer Science

Baylor University

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Education

09/04 – 12/08 **Tufts University, School of Engineering Medford, MA** Doctor of Philosophy in Computer Science, December 2008

01/03 – 09/04 **Bowling Green State University Bowling Green, OH** Master of Science in Computer Science, September 2004

09/98 – 12/02 **Bowling Green State University Bowling Green, OH** Bachelor of Science in Computer Science and Psychology, December 2002

Appointments

08/12 – **Baylor University Waco, TX**

Associate Professor

Department of Computer Science

School of Engineering and Computer Science

09/08 – 08/12 **Bowling Green State University Bowling Green, OH**

*Visiting Assistant Professor*

Department of Computer Science

College of Arts and Science

09/07 – 05/08 **Tufts University Medford, MA**

*Lecturer*

Department of Computer Science

09/06 – 08/07 **Tufts University Medford, MA**

*Lab Instructor*

Department of Computer Science

09/04 – 08/06 **Tufts University Medford, MA**

*Teaching Assistant*

Department of Computer Science

01/03 – 09/04 **Bowling Green State University Bowling Green, OH**

*Teaching Assistant*

Department of Computer Science

Teaching Experience

## At Baylor University

CSI 1430: Introduction to Computer Science

CSI 3344: Introduction to Algorithms

CSI 4342: Gaming Platform Frameworks

CSI 4341: Computer Graphics

CSI/STA 2300: Introduction to Data Science

CSI 5388: Advanced Topics in HCI

CSI 5v93: Input, Interaction, & Accessibility

## At Bowling Green State University

CS 1000: Computer Basics

CS 2010: Programming Fundamentals

CS 2020: Object-oriented Programming

CS 3140: Web Application Development

CS 3240: Usability Engineering

CS 3350: Data Structures and Algorithms

CS 4640/5640: Software Engineering

CS 6650: Human Issues in Computing

CS 6800: Next Generation Interfaces

## At Tufts University

CS 10: Introduction to Digital Information

CS 11: Introduction to Computer Science

Graduate students supervised/advised

## Current and Former Students

09/10 – 05/11 Jordan Ringenberg Faculty member at University of Findley

09/10 – 05/12 Brianna J. Tomlinson Currently a PhD student at Georgia Tech

09/11 – 05/12 Martez Mott Currently a PhD student at the University of Washington

09/11 – 05/12 Thomas Donahue Smart Behaviors Engineer at Piaggio Fast Forward

12/12 – 05/14 Alvin Jude Hari Haren Currently a Research Engineer at Ericsson

09/13 – 08/15 Darren Guinness Currently a PhD student at U of Colorado – Boulder

09/13 – 05/16 Garret Benoit Currently at SAS

09/15 – 05/16 Caleb Connor Software Engineer at ShipStation

09/16 – 05/18 Kuanysh Zhunussov Mobile Developer at Noble Applications

09/17 – 08/19 Mikhail Shmurygin iOS Engineer at Fetch Package Inc.

09/18 – Timothy Arterbury Current 2nd year MA student

Publications

Poor, G.M. & Jude, A. (2019, Oct) Interaction can hurt – Exploring gesture-based interaction for users with Chronic Pain. In *Proceedings of the 2019 Symposium on Spatial User Interaction.* ACM

Girouard, A., Shaer, O., Solovey, E. T., Poor, G. M., & Jacob, R. J. (2019). The Reality of Reality-Based Interaction: Understanding the Impact of a Framework as a Research Tool. *ACM Transactions on Computer-Human Interaction (TOCHI)*, *26*(5), 35.

Arterbury, T., & Poor, G. M. (2019, April). 3D Positional Movement Interaction with User-Defined, Virtual Interface for Music Software: MoveMIDI. In *Extended Abstracts of the 2019 CHI Conference on Human Factors in Computing Systems* (p. INT045). ACM.

Jaffee, S. D., Leventhal, L. M., Ringenberg, J., & Poor, G. M. (2018, April). Interactive 3D Objects, Projections, and Touchscreens. In *Proceedings of the Technology, Mind, and Society* (p. 18). ACM.

Benoit, G., Poor, G. M., & Jude, A. (2017, May). Bimanual Word Gesture Keyboards for Mid-air Gestures. In *Proceedings of the 2017 CHI Conference Extended Abstracts on Human Factors in Computing Systems* (pp. 1500-1507). ACM.

Poor, G. M., Jaffee, S. D., Leventhal, L.M., Ringenberg, J., Klopfer, D.S., Zimmerman, G., & Klein, B.A. (2016, October). Applying the Norman 1986 User-Centered Model to Post-WIMP UIs: Theoretical Predictions and Empirical Outcomes. *ACM Transactions on Computer-Human Interaction (TOCHI),* 23(5), 30.

Dover, A., Poor, G.M., Guinness, D., & Jude, A. (2016, October). Improving Gestural Interaction with Augmented Cursors. In *Proceedings of the 2016 Symposium on Spatial User Interaction* (pp. 135-138). ACM.

Jude, A., Poor, G.M., & Guinness, D. (2016, October). Grab or Pinch? Identifying User Preference for In-Air Gestural Manipulation. In *Proceedings of the 2016 Symposium on Spatial User Interaction* (pp. 219-219). ACM.

Conner, C., & Poor, G. M. (2016, May). Correcting Exercise Form Using Body Tracking. In *Proceedings of the 2016 CHI Conference Extended Abstracts on Human Factors in Computing Systems* (pp. 3028-3034). ACM.

Jude, A., Guinness, D., & Poor, G. M. (2016, May). Reporting and Visualizing Fitts's Law: Dataset, Tools and Methodologies. In *Proceedings of the 2016 CHI Conference Extended Abstracts on Human Factors in Computing Systems* (pp. 2519-2525). ACM.

Guinness, D., Jude, A., Poor, G. M., & Dover, A. (2015, August). Models for Rested Touchless Gestural Interaction. In *Proceedings of the 3rd ACM Symposium on Spatial User Interaction* (pp. 34-43). ACM.

Guinness, D., Seung, A., Dover, A., Poor, G. M., & Jude, A. (2015, August). Modeling Mid-air Gestures With Spherical Coordinates. In *Proceedings of the 3rd ACM Symposium on Spatial User Interaction* (pp. 133-133). ACM.

Jude, A., Poor, G. M., and Guinness, D. Evaluating Multimodal Interaction with Gestures and Speech for point and select tasks. *NordiCHI ’14 Proceedings of the 9th Nordic Conference on Human-Computer Interaction*, NordiCHI’14, ACM (New York, NY, USA,2014).

Jude, A., Poor, G. M., and Guinness, D. An Evaluation of Touchless Hand Gestural Interaction for Pointing Tasks with Preferred and Non-preferred Hands. *NordiCHI ’14 Proceedings of the 9th Nordic Conference on Human-Computer Interaction* , NordiCHI’14, ACM (New York, NY, USA,2014).

Guinness, D., Poor, G. M., and Jude, A. Gestures with Speech for Hand-Impaired Persons. *ASSETS ’14 Proceedings of the 16th International ACM SIGACCESS Conference on Computers and Accessibility*, ASSETS ‘14, ACM (Rochester, NY, USA, 2014).

A. Jude, G.M. Poor, and D. Guinness. Personal Space: User Defined Gesture Space for GUI Interaction. Work-in-Progress at the *ACM 2014 SIGCHI Conference on Human Factors in Computing Systems*. 26 April – 1 May 2014, Toronto, Canada.

G.M. Poor, G. Zimmerman, D.S. Klopfer, S.D. Jaffee, L.M. Leventhal, J. Barnes. Mobility Matters: identifying cognitive demands that are sensitive to orientation. *INTERACT 2013 - The 14th IFIP TC13 Conference on Human-Computer Interaction*, Cape Town, South Africa, 2-6 September 2013.

G.M. Poor, Brianna J. Tomlinson, Darren Guinness, Samuel D. Jaffee, Laura M. Leventhal, Guy Zimmerman, Dale S. Klopfer. Tangible or Gestural: Comparing Tangible vs. Kinect™ Interactions with an Object Manipulation Task. Poster presented at *Seventh International Conference on Tangible, Embedded and Embodied Interaction (TEI’13)*, 10 – 13 February 2013, Barcelona, Spain.

T.J. Donahue, G. M. Poor, M.E. Mott, L.M. Leventhal, G. Zimmerman, D. Klopfer. (2013). On Interface Closeness and Problem Solving. In*Seventh International Conference on Tangible, Embedded and Embodied Interaction (TEI’13)*, 10 – 13 February 2013, Barcelona, Spain.

G. M. Poor, Guy Zimmerman, Laura Marie Leventhal, Dale S. Klopfer, Julie Barnes, Samuel D. Jaffee. Using Mobile Devices to Deliver Instructions for Construction Tasks with Interactive 3D Models: The Interaction of Orientation and Individual Differences. Mobile Accessibility Workshop to be held at the *14th edition of MobileHCI'12, ACM SIGCHI's International Conference on Human-Computer Interaction with Mobile Devices and Service*. September 21, 2012.

M.E. Mott, T.J. Donahue, G.M. Poor, L.M. Leventhal, S.D. Jaffee, B.J. Tomlinson. (2012). “TangibleRubik: Leveraging Motor Learning for a Tangible Password System.” Work-in-Progress at the *ACM 2012 SIGCHI Conference on Human Factors in Computing Systems*, 5 – 10 May 2012, Austin, Texas.

G.M. Poor, L.M. Leventhal, J. Barnes, D. R. Hutchings, P. Albee, L. Campbell. (2012). "No user left behind: Including accessibility in student projects and the impact on CS students’ attitudes." The *ACM Transactions on Computing Education*, Volume 12 Issue 2, April 2012, Article No. 5.

G.M. Poor, Laura M. Leventhal, Scott Kelley, Jordan Ringenberg, Samuel D. Jaffee. (2011). “Thought Cubes: Exploring the Use of an Inexpensive Brain-Computer Interface on a Mental Rotation Task.” Poster session presented at *ASSETS ’11: 13th ACM SIGACCESS Conference on Computers and Accessibility*, 24 - 26 October 2011, Dundee, Scotland.

G.M. Poor, R.J.K. Jacob. (2010). “Introducing Animatronics to HCI: Extending Reality-Based Interaction”. In *HCI International 2011*, 9 - 14 July 2011,Orlando, Florida, USA.

G.M. Poor, T.J. Donahue, M.E. Mott, G.W. Zimmerman, L.M. Leventhal. (2010). “Access-a-WoW: Building an Enhanced World of Warcraft™ UI for Persons with Low Visual Acuity”. In *HCI International 2011*, 9 - 14 July 2011,Orlando, Florida, USA.

G.W. Zimmerman, D. Klopfer, G.M. Poor, J. Barnes, L.M. Leventhal, S. Jaffee. (2010). “How Do I Line Up?: Reducing Mental Transformations to Improve Performance”. In *HCI International 2011*, 9 - 14 July 2011,Orlando, Florida, USA.

R. Hippler, D. Klopfer, L.M. Leventhal, G.M. Poor, B. Klein, S. Jaffee. (2010). “More than Speed?: An Empirical Study of Touchscreens and Body Awareness on an Object Manipulation Task”. In *HCI International 2011*, 9 - 14 July 2011,Orlando, Florida, USA.

G.M. Poor, L.M. Leventhal, J. Barnes, D.R. Hutchings. (2009). “Accessibility: Understanding Attitudes of CS Students”. Poster session presented at *ASSETS ’09: 11th ACM SIGACCESS Conference on Computers and Accessibility*, 26-28 October 2009, Pittsburgh, PA, USA.

J. Barnes, G.M. Poor, L.M. Leventhal, G. Zimmerman, D. Klopfer. (2005). “Look and Touch: The Impact of Touchscreens on the Delivery of Instructions for Inherently 3D Construction Tasks Using Web-Delivered Virtual Reality”. Paper presented at IPSI-2005 Amsterdam, 1 - 4 September 2005; Amsterdam, The Netherlands.

Funding Activity

## Proposals – Awarded

* NSF’s Cyber Human Systems EAGER ($158,568) – Gesture-based Interaction for Users Suffering from Chronic Pain. (PI) **(COMPLETED)**
* NSF’s Partnerships for Innovation: Building Innovation Capacity (PFI:BIC) – Smart Water Reclamation Systems for Tailored Water Reuse and Low Carbon Footprint (Co-PI) ($959,945.00) **(COMPLETED)**
* NSF’s HDR DSC: Collaborative Research: Modernizing Water and Wastewater Treatment through Data Science Education & Research (MoWaTER) (Co-PI) ($716,126.00 Y2D) **(09/19 – TBD)**

## Proposals – Pending

* Paralyzed Veterans of America (PVA) Research Grant – Gesture-Based interaction control system for wheelchair-bound users. (PI)

Invited Talks and Demos

* “3D Positional Movement Interaction with User-Defined, Virtual Interface for Music Software: MoveMIDI.” *2019 CHI Conference on Human Factors in Computing Systems.* Glascow, UK. May 4-9, 2019
* “Where do we go from here? Next-Gen Interaction Techniques.” Clearview Client Conference @ Rough Creek Lodge, Texas, July 17, 2014
* “The 12 Laws of Animatronics”, **G Michael Poor**, Gene W. Poor. TEDxBGSU, Bowling Green State University, Bowling Green, Ohio. September 16, 2011
* “The Importance of Professional Retailscape”, Gene W. Poor, **G. Michael Poor**. Cardinal Health Retail Business Conference, July 29 – August 1, 2009, Washington D.C.
* “Animatronics: Can they teach?” Gene W. Poor, **G. Michael Poor**. School of Informatics, Indiana University, Bloomington. November 3, 2008

Professional Service

## Academic Service

* Search Committee for Lecturer Position, 8/12 – 05/14.
* Committee member Undergraduate Committee.
* Committee member Graduate Committee.
* Committee member for ABET accreditation committee.
* Committee member for CSI 1095 Ad Hoc Committee.
* Committee head of Gaming Committee.
* CSI 1430 Intro Coordinator.
* Committee head of Personnel Committee.

## Journal, Conference, and Grant Reviewer

* Journal of Accessible Computing, 2016
* Program Committee – Tangible, Embedded and Embodied Interaction, 2016
* NSF Panel Reviewer, 2014
* ACM SIGCHI Symposium on Engineering Interactive Computing Systems, 2013
* ACM SIGCHI Conference on Human Factors in Computing Systems, 2013 - 2020
* ACM SIGASSETS Conference on Computers and Accessibility, 2014
* ACM SIGTEI conference on Tangible, Embedded and Embodied Interaction, 2015 - 2019
* Session Chair, the 3rd ACM Symposium on Spatial User Interaction 2015