

Yousef Jalali

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EDUCATION

- Virginia Tech**, Blacksburg, VA, USA Dec. 2021 (Expected)
Ph.D. in Engineering Education
Certificate: Future Professoriate
- Lehigh University**, Bethlehem, PA, USA Dec. 2013
M.Eng. in Energy Systems Engineering
Certificate: Teacher Development Level I and II
- Islamic Azad University- Shahrood Branch**, Shahrood, Iran Feb. 2006
M.Sc. in Chemical Engineering
- Islamic Azad University- North Tehran Branch**, Tehran, Iran Sept. 2003
B.Sc. in Chemical Engineering

TEACHING EXPERIENCE

- Virginia Tech**, Blacksburg, VA, USA Jan. 2015-May 2018
Graduate Teaching Assistant, Instructor of Record, Department of Engineering Education
Courses taught: Foundations of Engineering I and II (spring 2015, summer I 2015, summer II 2015, spring 2017, fall 2017, spring 2018)
- Islamic Azad University-Shahrood Branch**, Shahrood, Iran Sept. 2006-Sept. 2011
Visiting Faculty, Department of Chemical Engineering. Courses taught include: Introduction to Chemical Engineering, Principles of Chemical Industries, Introduction to Process Flow Sheets, Mass Transfer, and Numerical Methods

AWARDS AND HONORS

- **Accepted to Online Ethics Center Workshop**, Working Ethics into the Conversation: Introducing STEM Faculty to Teaching Ethics, Washington D.C., Oct. 2019
- **GTA Award Selection Committee Member**, Virginia Tech, Feb. 2019 and Feb. 2020
- **Graduate Student Service Excellence Award**, Graduate School, Virginia Tech, 2017
- **Associate Member**, Virginia Tech Graduate Academy for Teaching Excellence, 2017-Present
- **Graduate Student Life Leadership Award**, Dean of Students Office, Lehigh University, 2014

RECENT PROJECTS

- Sustaining Faculty Collaboration: An Exploratory Process-Based Study of Research Collaboration Between HBCU/MSI and PWI** Aug. 2018-Present
Designed a qualitative case study to explore factors that influence sustainability of faculty collaboration
Administered surveys and conducted interviews with faculty
Studied organizational documents

HBCU/MSI Research Summit: An Interinstitutional Collaborative Effort Aug. 2018-Present
Developed a research project to evaluate the effectiveness and long-term impacts of the program
Administered surveys and conducted interviews with students and faculty
Analyzed qualitative and quantitative data
Assisted with the planning and organization of the summit

Ethical Reasoning and the Role of Imaginal Capacity Aug. 2019-Nov.2020
Developed modules and measures for an ethics intervention in a graduate-level engineering ethics course, CEE 5804: Engineering Ethics and the Public

NSF/REU Site: Interdisciplinary Water Science and Engineering Aug. 2017-Aug. 2020
Developed measures for program evaluation
Developed and facilitated ethics and communication sessions
Assisted in writing the renewal proposal (2019)
Led the programming for professional development activities
Coordinated with faculty members and different units on campus

NSF/IRES: US-China Collaboration: Bats as Model Organisms for Bioinspired Engineering Aug. 2017-Aug. 2019
Developed measures for program evaluation
Administered surveys and conducted interviews
Analyzed qualitative and quantitative data

Technology Student Association Tests of Engineering Aptitude, Mathematics, and Science (TEAMS) Competition July-Aug. 2015
Developed an engineering scenario "Pumping System" for TEAMS Competition 2016

A Self-Assessment of Evidence-based Instructional Practices and Outcomes in STEM-related Core Courses for STEM Majors and Non-Majors Aug. 2015-May 2016
Graduate Teaching Assistant, ENGE 2984: Citizen Engineering
Assisted with grading
Provided lecture materials for ethics module

MANUSCRIPTS- UNDER REVIEW

- **Jalali, Y.**, Mathies, C. Lohani, V. (2021). Imagination and Moral Deliberation: A Case Study of an Ethics Discussion Session, International Journal of Engineering Education.

REFEREED CONFERENCE PAPERS

- **Jalali, Y.**, Matheis, C., Edwards, M. (2021). A Graduate-Level Engineering Ethics Course: An Initial Attempt to Provoke Moral Imagination, American Society for Engineering Education Annual Conference (accepted).
- Abdelhamid, S., **Jalali, Y.**, Katz, A. (2021). Factors Associated with Collaboration Networks in ASEE Conference Papers, American Society for Engineering Education Annual Conference (accepted).

- Freix, S., **Jalali, Y.**, Brogan, D., Kothiyari, A., Lohani, V. (2021). Development of a Crayfish Behavior Case Study for a New First-Semester General Engineering Course Using a High Frequency Environmental Monitoring System, American Society for Engineering Education Annual Conference (accepted).
- **Jalali, Y.**, Lee, S., Grimes, J. (2021). The HBCU/MSI Research Summit: Building Relationships and Exploring the Process of Interinstitutional Partnership between a PWI and HBCUs and MSIs, Collaborative Network for Engineering and Computing Diversity (CoNECD) Conference, Crystal City, VA, Jan. 24-27.
- **Jalali, Y.**, Matheis, C., Tysor, C., Lohani, V. (2021). Sustaining Faculty Collaboration: An Exploratory Process-Based Study of Research Collaboration Across Universities, Collaborative Network for Engineering and Computing Diversity (CoNECD) Conference, Crystal City, VA, Jan. 24-27.
- **Jalali, Y.**, Civjan, S. (2020). Many Facets of Imagination: What Really Matters in Engineering Ethics Instruction? 2020 American Society for Engineering Education Virtual Conference.
- **Jalali, Y.**, Sheikhan, N., Bakhtiari Nejad, F. (2019). Integrating Engineering Ethics Instruction into Engineering Curricula in Iran: An Invitation for Dialogue, 6th Iran International Conference on Engineering Education, Mashhad, Iran, Nov. 19-21. [In Farsi]
- **Jalali, Y.**, Mueller, R., Lohani, V.K. (2019). Development and Contribution to Students' Intercultural Skills: A Case Study of an International Collaborative Site, Frontiers in Education Conference, Cincinnati, OH, Oct. 16-19.
- **Jalali, Y.**, Matheis, C., Lohani, V.K. (2019). Ethics Instruction and the Role of Liberatory Praxis and Theory” American Society for Engineering Education Annual Conference, Tampa, FL, June 15-19.
- **Jalali, Y.**, Tysor, C., Matheis, C., Lohani, V.K. (2019). Diversity and Inclusion and Research Partnership Development: Can Seed Investments Really Help Promote Trans-Institutional Collaborations? The Collaborative Network for Engineering and Computing Diversity (CoNECD) Conference, Crystal City, VA, Apr. 14-17.
- Davis, K., **Jalali, Y.**, Knight, D.B., Lohani, V.K. (2018). Student Learning in International Research Programs: A Comparison Across Cultural Contexts, American Society for Engineering Education Annual Conference, Salt Lake City, UT, June 24-27.
- **Jalali, Y.**, Matheis, C. (2017). Liberation in Education: What Role Do Liberatory Praxis and Theory Play in Fostering Critical Thinking? American Society for Engineering Education Annual Conference, Columbus, June 25-28.
- Riley, D.M., Grunert, J., **Jalali, Y.**, Adams, S.J. (2016). Citizen Engineering: Disrupting Expertise in Classroom and Community, American Society for Engineering Education Annual Conference, New Orleans, June 26-29.

OTHER CONFERENCE PRESENTATIONS

- **Jalali, Y.**, Matheis, C. (2019). Imagining Relationally: A Critical Bridge Between Theory and Practice” AAC&U Transforming STEM Higher Education, Chicago, IL, Nov. 7-9.
- **Jalali, Y.**, Matheis, C. (2018). Does Imagination Alter Reasoning? A Dialogue on the Role of Imagination in Critical Thinking, AAC&U Transforming STEM Higher Education, Atlanta, GA, Nov. 8-10.
- **Jalali, Y.** (2013). “Developing an IEEE Elearning Library Course on Energy Efficiency in Industry” Poster presented at the American Institute of Chemical Engineers Annual Meeting, San Francisco, USA, Nov. 3-8.
- **Jalali, Y.** (2011). “An Introductory Course Planning in Chemical Engineering” American Institute of Chemical Engineers Annual Meeting, Minneapolis, MN, USA, Oct. 16-21.
- **Jalali, Y.** (2010). “Urgency of Reform in Chemical Engineering Education in Iran” 19th International Congress of Chemical and Process Engineering, Prague, Czech Republic, Aug. 28- Sept. 1.

PROFESSIONAL WORKSHOPS

- Lohani, V.K., Smith, J., **Jalali, Y.** (2019). "Enhancing Interdisciplinary Research for Undergraduates: Experiences from a Successful NSF/REU Site (2007-2019)" NSF-Sponsored Workshop, American Society for Engineering Education Conference, Tampa, FL, June 15.

OTHER PROFESSIONAL EXPERIENCE

Virginia Tech , Blacksburg, VA, USA Dec. 2016-Present
Graduate mentor and graduate assistant, Learning Enhanced Watershed Assessment System Lab
Mentored undergraduate students
Assisted with classroom interventions and outreach programs

Lehigh University, Bethlehem, PA, USA Feb. 2014-May 2014
Project Assistant, Industrial Assessment Center
Provided lecture materials for the Energy Efficiency Practicum course
Assisted undergraduate and graduate students in providing energy efficiency recommendations

Lehigh University, Bethlehem, PA, USA Aug. 2012-Jan. 2014
Supervisor, Graduate Assistant, Library and Technology Services

Benzene Unit, Tabriz Petrochemical Company, Tabriz, Iran July 2003-Aug. 2003
Summer trainee

UNIVERSITY SERVICES AND ENGAGEMENT

- **Instructor**, GTA Workshop: "Teaching for Thinking and Imagination", Graduate School, Virginia Tech, Mar. 20, Nov. 9, and Nov. 10, 2019.
- **Interview panelist**, Interview with Pakistani Fulbright Scholars in the Teaching Excellence and Achievement Program, Trustees without Borders, Institute for Policy and Governance, Virginia Tech, June 29 and Aug. 10, 2018.
- **Panelist**, GTA Workshop, Graduate School, Virginia Tech, Jan. 17 and Oct. 14, 2019.
- **Panelist**, Understanding International Student Experience, International Voices, Cranwell International Center, Virginia Tech, Nov. 10, 2017 and Nov. 1, 2019.
- **Panelist**, Graduate Student Panel, Professional Development Seminar Series, Office of Undergraduate Research, Virginia Tech, June 6, 2018.
- **Panelist**, Graduate Student Orientation, Graduate School, Virginia Tech, Aug. 2015, Jan. 2016, and Aug. 2017
- **President**, Iranian Society at Virginia Tech, Virginia Tech, Sep. 2015-Sept. 2016
- **Event Organizer**, "Love, Happiness, and Unity," Graduate Life Office, Lehigh University, May 8, 2014
- **Chair**, Professional Development Committee, Graduate Student Senate, Lehigh University, May 2013- Dec. 2013
- **Career Ambassador**, Career Services, Lehigh University, Aug. 2013-Dec. 2013
- **Board Member**, Lehigh University Iranian Students Association, Aug. 2013-Dec. 2013
- **Unit Representative**, Graduate Student Senate, Lehigh University, Sept. 2012-Aug. 2013
- **Organizing Committee Member**, State Conference of Chemistry and Chemical Engineering, Islamic Azad University-Shahrood Branch, Mar. 2008

INVITED PRESENTATIONS

- “Approaches for Evaluating an NSF-IRES Program: An Example of Program Evaluation for Educational Research Proposals”, The Center for Bioinspired Science and Technology (BIST) Seminar, Virginia Tech, Nov. 21, 2019.
- “The Beauty of God”, Lehigh Speaks: Challenging Global Concepts, Lehigh University, Apr. 4, 2014.
- “Mass transfer operations in carbon capture: Absorption and adsorption processes” for Energy Generation course, Professor William Gould, Lehigh University, Sept. 30, 2013.
- “Professional Development” Graduate Student Senate, Lehigh University, May 22, 2013.
- “Iranian culture” for Composition and Literature course, Professor Marcella Gamallo, Lehigh University, Jan. 31, 2013.
- “My personal life” for Immigration Literature course, Professor Marcella Gamallo, Lehigh University, Dec. 4, 2012.

COMMUNITY SERVICE

- Volunteer, Blacksburg Refugee Partnership, June 2017-May 2019