IDENTIFYING INFORMATION:

NAME: Borrelli, R. A.

ORCID iD: https://orcid.org/0000-0003-0274-9253

POSITION TITLE: Associate Professor

PRIMARY ORGANIZATION AND LOCATION: University of Idaho - Idaho Falls Center for Higher Education, Idaho Falls, Idaho, United States

Professional Preparation:

ORGANIZATION AND LOCATION	DEGREE (if applicable)	RECEIPT DATE	FIELD OF STUDY
University of California-Berkeley, Berkeley, California, United States	PHD	08/1999 - 12/2006	Nuclear Engineering
Worcester Polytechnic Institute, Worcester, Massachusetts, United States	MS	08/1996 - 05/1999	Civil/Environmental Engineering
Worcester Polytechnic Institute, Worcester, Massachusetts, United States	BS	08/1992 - 05/1996	Mechanical/Nuclear Engineering

Appointments and Positions

2021 - present Associate Professor, University of Idaho - Idaho Falls Center for Higher Education, Department of Nuclear Engineering and Industrial Management, Idaho Falls, Idaho, United States

2025 - present Affiliate Faculty – Electrical & Computer Engineering, University of Idaho, Idaho Falls, Idaho, United States

2019 - present Professional Engineer Faculty Restricted, State of Idaho, Idaho Falls, Idaho, United States

2019 - present Coordinator, Nuclear Power Plant Decommissioning and Used Fuel Management Professional Certificate, University of Idaho, Idaho, United States

2019 - present Affiliate, Boise State University Energy Policy Center, Boise, Idaho, United States

2015 - 2021 Assistant Professor, University of Idaho - Idaho Falls Center for Higher Education, Department of Nuclear Engineering and Industrial Management, Idaho Falls, Idaho, United States

2012 - 2015 Adjunct Professor, Diablo Valley Community College, Department of Architecture and Engineering , Pleasant Hill, California, United States

2009 - 2012 Postdoctorate Researcher, University of California-Berkeley, Department of Nuclear Engineering, Berkeley, California, United States

2007 - 2009 Research Associate, The University of Tokyo, Department of Nuclear Engineering/Management, Tokyo, Not Applicable, N/A, Japan

Products

Products Most Closely Related to the Proposed Project

1. Peterson J, Haney M, Borrelli RA. An overview of methodologies for cyber security vulnerability assessments conducted in nuclear power plants. Nuclear Engineering and Design. 2019; 346:75.

2. Lee J, Shigrekar A, Borrelli R. Hazard and operability analysis of a pyroprocessing facility. Nuclear Engineering and Design. 2019; 348:131.
3. Redfoot EK., Verner KM., Borrelli RA.. Applying analytic hierarchy process to industrial process design in a Nuclear Renewable Hybrid Energy System. Progress in Nuclear Energy. 2022 January; 145:104083.
4. Mena P, Borrelli RA., Kerby L. Expanded Analysis of Machine Learning Models for Nuclear Transient Identification Using TPOT. Nuclear Engineering and Design. 2022; 390:111694.
5. Root SJ, Zhao H, Borrelli RA, McKellar MG. Thermodynamic Analysis on Xenon Stripping to Shorten Restart Time in Molten Salt Microreactors. Nuclear Engineering and Design. 2023; 414:112606.

Other Significant Products, Whether or Not Related to the Proposed Project

1. Carter J, Borrelli RA. Neutron physics study of an integral molten salt reactor using Monte Carlo N-Particle code. Nuclear Engineering and Design. 2020; 365. DOI: 10.1016/j.nucengdes.2020.110718
2. Lee J, Tolman M, Borrelli RA. High reliability safeguards approach to remotely handled nuclear processing facilities: Use of discrete event simulation for material throughput for fuel fabrication. Nuclear Engineering and Design. 2017; 324:54.
3. Tacke J, Borrelli R, Roberson D. Advanced frequency-domain compensator design for subsystems within a nuclear generating station. Progress in Nuclear Energy. 2021; 140. DOI: 10.1016/j.pnucene.2021.103914
4. Root SJ, Throckmorton P, Tacke J, Benjamin J, Haney M, Borrelli RA. Cyber Hardening of Nuclear Power Plants with Real-time Nuclear Reactor Operation – 1. Preliminary Operational Testing. Progress in Nuclear Energy. 2023; 162:104742.
5. Borrelli R, Araujo K, Koerner C, Djokic D. Consent based siting for Spent Nuclear Fuel – The Common Ground Consortium Focus on Research and Public Conversations. Proc., American Nuclear Society Annual Meeting. 2024.

Synergistic Activities

1. University of Idaho: Faculty Advisor - American Nuclear Society University of Idaho Student Section
2. Idaho Section of the American Nuclear Society: Treasurer; Coordinator - Smoke Detector Donation Program
3. American Nuclear Society: National Program; Screening Committee Member
4. University of Idaho: College of Engineering Faculty Senate

Certification:

When the individual signs the certification on behalf of themselves, they are certifying that the information is current, accurate, and complete. This includes, but is not limited to, information related to domestic and foreign appointments and positions. Misrepresentations and/or omissions may be subject to prosecution and liability pursuant to, but not limited to, 18 U.S.C. §§ 287, 1001, 1031 and 31 U.S.C. §§ 3729-3733 and 3802.

Certified by Borrelli, R. A. in SciENcv on 2025-12-16 17:38:23