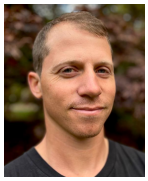
Curriculum Vitae

PERSONAL INFORMATION



Bryan Robert Murray, P.E.

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Sex M | Date of birth March 10, 1988 | Nationality USA

WORK EXPERIENCE

2022 - Present — Senior Engineer

The Clean Coalition (USA)

- Leading electrical design for advanced solar + storage microgrid systems
- Software development for load and generation forecast and energy storage dispatch
- Distribution grid modelling to improve local renewable energy hosting capacity

2015 - 2021 — Co-founder, Electrical Engineer

CalWave Power Technologies, Inc. (USA)

- Electrical engineering lead for U.S. Department of Energy Research and Development Contracts
  - $10M total funding across multiple competitive award solicitations
- Designed, tested, and commissioned a sophisticated electrical-mechanical-hydraulic regenerative energy drive train
  - Bespoke inverter controls and supplementary DC link capacitance design
  - Hardware-in-the-loop testing and controls development
  - Energy export and grid integration design, coordination, and execution
- Techno-economic modelling and forecasting

EDUCATION AND TRAINING

2023- Present — PhD – Energy and Process Control

University of Oviedo (Spain)

- Distributed generation impacts on medium-voltage electric grids
- Grid modelling using Python and open-source tools
- Applications of advanced inverter and microgrid controls (IEEE 1547, IEEE 2030)

2021 - 2023 — MSc in Electric Power Systems

University of Nottingham (UK)

- Thesis: “Benefit of Behind-the-Meter DC Coupled Microgrids in Constrained AC Distribution Networks”

2007 - 2012 — BSc in Electrical Engineering

Virginia Tech (USA)

ADDITIONAL INFORMATION

Memberships

- Licensed Professional Engineer (California, USA)

Publications and Conference Papers

- Offshore Wind and Wave Energy Can Reduce Total Installed Capacity Required in Zero Emission Grids
  - Nature Communications, 2024
- Network Benefits from Voltage Regulation by Inverter Based Resources
  - IEEE Power Electronics Society General Meeting, 2024
- Two-Stage Monte Carlo Simulation to Forecast Levelized Cost of Electricity for Wave Energy
  - International Conference on Renewable Energy Research and Applications, 2017

Languages

English (Native), Spanish (B2)