Peter Grant

Professional Experience

SENIOR SCIENTIFIC ENGINEERING ASSOCIATE, LBNL, 2021-PRESENT

- Developed VOLTTRON-based platform simultaneously controlling lights and facades
- Created a library of machine learning forecasters for microgrid deployment

SENIOR RESEARCH MANAGER, BEYOND EFFICIENCY, 2019-2021

- Performed Title 24 CASE analysis on drain water heat recovery devices, using Python scripts replicating the Title 24 hot water draw profiles
- Created simulation models for unitary heat pump water heaters and a prototype gas absorption heat pump water heater
- Evaluated the performance of advanced load shifting controls in multifamily heat pump water heater installations

SENIOR ENGINEER, DAVIS ENERGY GROUP/FRONTIER ENERGY, 2015-2019

- Evaluated the potential of and created a Python script implementing load shifting control for heat pump water heaters
- Performed Title 24 CASE analyses on drain water heat recovery devices and compact hot water distribution systems
- Developed a learning algorithm to understand occupant hot water use patterns

RESEARCHER, EUROPEAN ACADEMY (EURAC), 2014 – 2015

- Predicted annual energy consumption before and after a retrofit using calibrated building simulation models. Identified weaknesses in the methodology and proposed better solutions for application in future projects

SCIENTIFIC ENGINEERING ASSOCIATE, LBNL, 2012 – 2013

- Created the Modelica Water Heating Library with water heaters and distribution systems
- Developed the first simulation model of FLEXLAB

PROJECT ENGINEER, EATON'S EMC ENGINEERS, 2010 – 2012

GRADUATE STUDENT RESEARCH ASSISTANT, UNIVERSITY OF COLORADO (CU)/NATIONAL RENEWABLE ENERGY LABORATORY (NREL), 2007 – 2010

Education/Certifications/Training

Professional Certificate in Innovation and Entrepreneurship, Stanford, 2021

M.S., Civil, Environmental and Architectural Engineering, University of Colorado, Boulder, 2010

B.S., Mechanical Engineering, Michigan Technology University, Houghton, MI, 2007