

Stanford



Matthew Bonanni

Ph.D. Student in Mechanical Engineering, admitted Autumn 2019

Bio

EDUCATION AND CERTIFICATIONS

- M.S., Stanford University , Mechanical Engineering (2021)
- B.S., Northeastern University , Mechanical Engineering, minor in Physics, summa cum laude (2019)

LINKS

- Portfolio Website: <https://matthewbonanni.weebly.com/>

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

Computational modeling of wildland fires

Computational fluid dynamics

Combustion

Machine learning

Scientific computing

Professional

WORK EXPERIENCE

- Engineering Intern - GE Global Research (June 2016 - September 2016)
- Mechanical Engineering Co-op - iRobot (January 2017 - June 2017)
- Vehicle Engineering Co-op - SpaceX (January 2018 - June 2018)
- Associate Engineer - Post Grad - SpaceX (May 2019 - August 2019)

Publications

PUBLICATIONS

- **Recurrent Convolutional Deep Neural Networks for Modeling Time-Resolved Wildfire Spread Behavior** *FIRE TECHNOLOGY*
Burge, J., Bonanni, M. R., Hu, R., Ihme, M.
2023
- **Interaction of preferential evaporation and low-temperature chemistry in multicomponent counterflow spray flames** *PROCEEDINGS OF THE COMBUSTION INSTITUTE*
Bonanni, M., Ihme, M.

