

# Anthony S. Walker

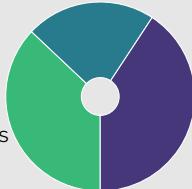
Ph.D. Candidate & Scientific Developer

## i CONTACT

-  walkanth@oregonstate.edu  
 707-337-3595  Waynesburg PA  
 @anthony-walker  @dev.sokato  
 Anthony Walker

## COURSEWORK

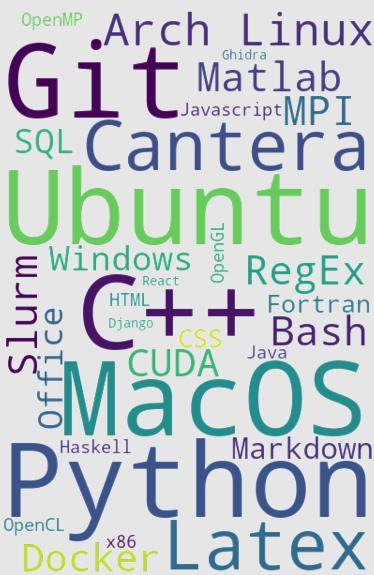
-  Thermal Fluid Sciences  
 Mathematics  
 Computer Science



## EDUCATION

- 2018 **Penn State**  
B.S. MECHANICAL ENGINEERING · Minor Computer Science  GPA: 3.41
- 2021 **Oregon State**  
M.S. MECHANICAL ENGINEERING ·  GPA: 3.83
- 2024 **Oregon State**  
PH.D. MECHANICAL ENGINEERING · Minor Computer Science  GPA: 3.83

## /> SOFTWARE



## LANGUAGES

- English | Native  
French | 

## ⚙ EMPLOYMENT

Aug 2016–May 2018	<b>Undergraduate Research Assistant</b> PENN STATE · Erie PA 
May 2017–Aug 2017	<b>Test Stand Engineering Intern</b> BELL HELICOPTER · Fort Worth TX 
Sept 2018–Present	<b>Graduate Research Assistant</b> OREGON STATE UNIVERSITY · Corvallis OR 
April 2022–Present	<b>KP-SAM Scientific Developer Intern</b> KAIROS POWER · Alameda CA 

## 🔎 PUBLICATIONS

- Applying generalized preconditioning to enable detailed kinetic modeling of SAF combustion and atmospheric evolution of products  
 **Walker, Anthony S.** Speth, Raymond L. Niemeyer, Kyle E.  
 2024  Manuscript in preparation
- Extending generalized preconditioning to accelerate simulations of coupled reactor and surface systems  
 **Walker, Anthony S.** Speth, Raymond L. Niemeyer, Kyle E.  
 2023  Manuscript in preparation
- Generalized preconditioning for accelerating simulations with large kinetic models  
 **Walker, Anthony S.** Speth, Raymond L. Niemeyer, Kyle E.  
 2022  PROCI: Proceedings of the Combustion Institute, <https://doi.org/10.1016/j.proci.2022.07.256>
- The two-dimensional swept rule applied on heterogeneous architectures.  
 **Walker, Anthony S.** & Niemeyer, Kyle E.  
 2021  MDPI: Mathematical and Computational Applications, <https://doi.org/10.3390/mca26030052>
- Applying the swept rule for solving explicit partial differential equations on heterogeneous computing systems  
 Magee, Daniel J & **Walker, Anthony S** & Niemeyer, Kyle E  
 2020  Journal of Supercomputing, <https://doi.org/10.1007/s11227-020-03340-9>