(503) 805-3264
samuel.whitman@colorado.edu

Samuel Whitman

Education

August 2016 – Present | CU Boulder | Boulder, CO

PhD, Mechanical Engineering (In Progress)

- 4.0 GPA.
- Recipient of the CU Dean's Outstanding Merit Fellowship.
- Recipient of the Vogel Family Graduate Energy & Fluids Fellowship.

September 2007 – June 2011 | Carleton College | Northfield, MN

BA, Physics

- Graduated with honors: *magna cum laude*.
- Senior thesis on fluid turbulence, intermittency and stochastic dynamics.
- Recipient of the National Merit Scholarship, Robert C. Byrd Federal Honors Scholarship, Academic All-Stars Scholarship and Elda Washer Scholarship.

Conference Presentations

- Whitman, S., Hamlington, P., & Poludnenko, A. (2017). Intermittency in Turbulent Premixed Hydrogen-Air Flames. *10th U.S. National Combustion Meeting, College Park, M.D*.
- Hamlington, P., Whitman, S., Towery, C., & Poludnenko, A. (2016). Analysis of Turbulent Scales of Motion in Premixed Flames Using Structure Functions. *Bulletin of the American Physical Society*, *61*.

Teaching Experience

January 2017 – May 2017 | CU Boulder | Boulder, CO

Teaching Assistant, Dynamics

- Individual instruction through office hours.

August 2016 – December 2016 | CU Boulder | Boulder, CO

Teaching Assistant, Fluid Mechanics

- Individual and group instruction through classroom lecturing, office hours and review sessions.

March 2008 – June 2011 | Carleton College | Northfield, MN

Tutor, Math Skills Center

- Individual instruction in concepts and problems for calculus, linear algebra and mathematical structures.

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Research Experience

June 2016 – Present | CU Boulder | Boulder, CO

Conditional Analysis of Turbulent Combustion with Professor Peter Hamlington

- Research on fundamental physics underlying turbulent combustion.
- Ongoing study of the statistical development of flame surfaces throughout the combustion process.

March 2011 – June 2011 | Carleton College | Northfield, MN

Tidal Gravitation Study with Professor Bill Titus

- Derived and implemented differential equations for tidal gravitational potential at any point on the Earth's surface at a given date and time.

June 2010 – September 2010 | Carleton College | Northfield, MN

Moon Loss Research with Professor John Weiss

- Numerical analysis of three-body celestial systems to predict the behavior of migratory planets and their moons.

Professional Experience

May 2012 – January 2015 | Epic | Verona, WI

Technical Coordinator

- Led team of twenty Epic Technical Services staff to support and enhance electronic medical record software at Wolcott, Wood & Taylor in Chicago.
- Coordinated major projects across organizations, including hardware migration, double-version upgrade, and ICD-10 transition.

September 2011 – January 2015 | Epic | Verona, WI

Technical Services

- Wrote and debugged Caché code in support of electronic medical record software at hospitals nationwide.

Technical Skills

Fortran (f90), Matlab, LaTeX, UNIX, Mathematica, IDL, Caché, VB6, SQL, Business Objects, MS Office Suite.

Interests

Turbulence, combustion, intermittency, energy cascade, coherent structures, computational fluids.