

Hoang, The Anh (Samuel)

Storrs, Connecticut 06268, USA

anh.t.hoang@uconn.edu • +1 (631) 747-8980 • <https://www.linkedin.com/in/anhthehoang/g>

OBJECTIVE STATEMENT

I am an analytical and detailed orientated engineering student with 2 years of numerical analysis, computational fluid dynamics, data analyst and 4 years of statistical mathematics & experimental physics experience. Upon completion of my Master's degree, I am looking for an engineering position to kickstart my career.

EDUCATION

University of Connecticut, Storrs, Connecticut, USA

▪ *M.S. in Mechanical Engineering (Thermal & Fluid Science)*

• GPA: 3.71

Sep 2020 – Present

Clark University, Worcester, Massachusetts, USA

▪ *B.A. (with honors) in Physics & Mathematics*

• GPA: 3.52

Sep 2016 – May 2020

SKILLS

Python, MATLAB, C, C++, Unix / Linux, R, \LaTeX , Fluid Dynamics, Aerodynamics, Numerical Analysis, CFD, Jupyter Notebook, Aerospace Design, SOLIDWORKS, Programming, 3D Printing, Communication, Data Analysis & Interpretation, Microsoft Programs (Excel, Powerpoint, Word, Teams), JAVA, Language (Vietnamese, English, French)

RELEVANT COURSES

Aerodynamics, Dynamics, Combustion,
Thermo-Fluids, Numerical Analysis, Computational Fluid Dynamics

RESEARCH EXPERIENCE

Graduate Research, University of Connecticut

Advisor: Prof. Alexei Poludnenko

▪ *Dynamics of 1-dimensional multiphase combustion*

- Simulate 1 dimensional multiphase flames using n-Dodecane as liquid fuel using Linux/Unix HPC environments
- Troubleshoot and modify an open-sourced C grid-based code to study reactive flow physics using different numerical & physical models
- Utilize Python, MATLAB and C to analyze flame speeds and propagation

Sep 2020 – May 2022

Undergraduate Research, Clark University

Advisor: Prof. Arshad Kudrolli and Benjamin Allen

▪ *Undulatory swimming dynamics in viscous and granular media*

- Construct and study the movements of artificial magnetic worms in various mediums driven by an oscillating magnetic field
- Measured the worm's velocity using image capture analysis software
- Observed movements were dependent on oscillation velocity and magnitude

Jun 2019 – Aug 2019

▪ *Motion of Vibrating Particle in Granular Media*

- Apply the Brazil Nut Effect to investigate the motion of a vibrating particle buried in granular media (the effect that causes larger particles to gather on top in a mixture)
- Design the circuitry and hardware with vibrating motors, power sources and wires
- Measured the resurface time vs burrowed depth

Jun 2018 – Aug 2018

▪ *Motion of a Dislodged Ball in a Liquid Over a Barrier*

- Investigate the motion of a spherical particle after dislodging over a barrier submerged a liquid of varying viscosity
- Studied shear stress affects on a spherical particle
- Measured the rotation and travel distance of the particle

Jun 2017 – Jul 2017

OTHER WORK EXPERIENCE	<p>Mechanical Engineering Department, University of Connecticut</p> <ul style="list-style-type: none"> ▪ <i>Thermodynamics + Engineering Analysis Teaching Assistant</i> Sep 2021–Jan 2022 <ul style="list-style-type: none"> • Assist up to 15 students weekly in assignments • Communicate student’s strength and weaknesses to teaching professor • Grade 40 homework assignments weekly <p>Office for Academic Support, Clark University</p> <ul style="list-style-type: none"> ▪ <i>Peer Academic Mentor</i> Sep 2019–Dec 2019 <ul style="list-style-type: none"> • Be a resource for 11 new students through out the school semester • Help mentees discover the university and the local area <p>Physics Department, Clark University</p> <ul style="list-style-type: none"> ▪ <i>Teaching Lab Assistant</i> Feb 2019–Dec 2019 <ul style="list-style-type: none"> • Assist a graduate student in running introduction to physics laboratories • Clarify laboratories procedures and methods ▪ <i>Astronomy Teaching Assistant</i> Jan 2020–May 2020 <ul style="list-style-type: none"> • Guide students to make night sky observations <p>Math Department, Clark University</p> <ul style="list-style-type: none"> ▪ <i>Mathematics Teaching Assistant</i> Aug 2017 –May 2020 <ul style="list-style-type: none"> • Lead discussion sessions of 8 to 15 students • Explain mathematical questions a student might have • Grade weekly homework and provide feedback to students
EXTRA CURRICULUM	<p>Association of Martial Artists at Clark, Clark University</p> <ul style="list-style-type: none"> ▪ <i>Liaison</i> Aug 2019 – May 2020 <ul style="list-style-type: none"> • Bridge communication between club members and leaders • Engage with 8 to 10 new club members to make sure they are comfortable • Co-run the club sessions of 2-3 hours with club President ▪ <i>Vice President</i> Aug 2018 – May 2019 <ul style="list-style-type: none"> • Ensure the safety of club members • Host monthly self-defence seminars • Advertise club at club fairs and welcome new members ▪ <i>Treasurer</i> Jan 2018 – May 2018 <ul style="list-style-type: none"> • Talk to other Eboard members about future club purchasing plans • Allocate club budget of \$1’500 • Track club spending on events and equipments <p>Splash, Clark University</p> <ul style="list-style-type: none"> ▪ <i>Instructor</i> Nov 2017 – Dec 2019 <ul style="list-style-type: none"> • Train class of 15 to 20 high school students self-defense • Talk about real life self-defense scenarios
HOBBIES	Chess, Sports (soccer, Muay Thai, gym, cycling, Aikido, Kendo, Brazilian Jiu-Jitsu), Playing Musical Instruments (guitar, piano), Book Reading, Cooking
CITIZENSHIP	Vietnamese, eligible to work in the USA.