

Chase Jonathan Hansel

- Objective Seeking full time position in Mechanical Engineering
- Heat transfer, Fluids, and MEMS fields are preferred
 - Testing and Data Collection position preferred
- Education
- University of Central Florida. Orlando, Florida
 - Masters of Science: Mechanical Engineering
 - Degree Focus: ThermoFluids
 - Awarded Provost's Graduate Fellowship for 07/08 while at UCF
 - Expected Graduation 8/08
 - GPA 3.8/4.0

 - University of Central Florida. Orlando, Florida
 - Bachelors of Science: Mechanical Engineering
 - Graduated, 12/06
 - GPA 3.4/4.0

 - A. Crawford Mosley High School. Panama City, Florida
 - Four years in Mosley Advanced Placement Program for Success
- Current Research MicroFluidics
- Masters thesis topic involves pressure losses through bends in "Micro" ducts. The project thus far has involved a 40+ source literature review, development of CAD masks for photolithographic duct construction, creation of testing procedures, integration of microchannels with pressure transducer and Data Acquisition (DAQ) systems, various methods to reduce uncertainty and errors and increase automation in data acquisition, and troubleshooting.
- Technical Engineering Software
Qualifications
- MathCAD • Excel • Solid Edge
 - MatLab • LabVIEW • Pro E
- Work Experience
- Teaching assistant at the University of Central Florida. 5/06 to present
 - Fall 07: Repeat of previous semester, EML 3303c with a larger class of 150 students and 6 TAs
 - Summer 07: Taught lecture portion of EML 3303c "Mechanical Engineering Measurements" with 80 students, instructed a lab section with 15 students, managed 4 other Teaching Assistants and managed of lab equipment setup and purchasing.

- Spring 07: instructed problem sessions containing 65 students for EGN 3358 “Thermo-Fluids-Heat Transfer” while creating new labs and purchasing equipment for EML 3303.
- Fall 06: instructed EML 3303c lab for 22 students and was in charge of equipment setup for all lab sessions.
- Summer 06: Lab instructor for EML 3303c for 24 students.
- Engineering Acoustics Incorporated 3/05 to 8/05. Technician tasked with assembly of various transducer devices. Job required carefully controlled epoxy mixing and application, tolerance checking, surface mount and high temperature soldering, and product performance testing.
- Employed as Mechanical Engineering Intern by Naval Surface Warfare Center in Panama City FL from 5/04 to 8/04 and 12/04. While at NSWC PC I designed a water tight switch system, actuator and electronic support plates, Ogive antenna cover, and a shipboard housing used to recharge batteries on the Remote Minehunting System (RMS), AN/WLD-1. All work for the RMS required complete level 2 engineering drafts from solid edge, and interfacing with the fabrication shop to ensure part completion. Held CONFIDENTIAL clearance at time of employment, an interim SECRET clearance was being processed.

Extracurricular Activities

Science Fair

- Competed in Senior division at regional and state level in 1999 and 2001. Received ASME, CSCE and Intel recognition awards. Finalist in State Science and Engineering Fair both years.
- Competed in Junior division at school, regional and state level in 1997 and 1998. Won regional grand prize in physical science both years and was a finalist in State Science and Engineering Fair both years.

Robotics

- Volunteered at the Robotics lab at UCF from 9/04 to 7/05. Jobs included the design CAD and fabrication of various housings, sensor mounts, and brackets for both the ground vehicles. Competed in the 2005 Intelligent Ground Vehicle Competition and took home second place in the design category.

Hobbies

- Actively participated in Boy Scouts of America Troop 310, 1996-2000
- Achieved rank of Eagle Scout, 06/98
- Life member of the National Eagle Scout Association
- 56 hours of community service while in the program
- Avid Certified SCUBA Diver

References

- Dr. Chew: Graduate Supervisor. Associate Professor at the University of Central Florida, MMAE Department. ENGR I 312, 4000 Central FL Blvd. Orlando, FL 32826, 407.924.3179 LNC@mail.ucf.edu
- Robert L. Peebles: Senior Electrical Engineer on RMS project, Naval Surface Warfare Center, Code A73, 110 Vernon Ave. Panama City, FL 32407-7000, 850.234.4782, robert.l.peebles@navy.mil

NSWC PC
110 Vernon Ave.
Panama City, FL 32407
850-234-4908

24 January 2005

Subject: Letter of Recommendation for Mr. Chase Hansel

To Whom It May Concern:

During the period of 17 March - 13 August 2004, Chase Hansel worked as a student intern with our engineering branch here at Naval Surface Warfare Center Panama City. Chase was asked to work on the design and development of the Remote Minehunting Vehicle (RMV) Test Vehicle. He worked with a number of engineers of varying levels of experience, both mechanical and electrical. During this time, Chase was asked to perform numerous tasks:

- Calculations (Stress and strain, center of gravity and buoyancy)
- Drafting and solid modeling
- Analysis of existing design/ Reverse Engineering
- Detailed design with drawings
- Spreadsheet compilation and maintenance (CG-CB)

Chase attended our weekly design meetings and participated in making engineering decisions. He was able to oversee production of some of his designs in our fabrication facilities.

Chase has a strong work ethic and a high level of ambition. He is a self-starter who enjoys being challenged. He enjoys seeing a project through and pays special attention to simplifying the fabrication process through intelligent design. Due to resource limits during his internship, Chase was often asked to perform tasks that would normally be reserved for beginning engineers. He operated above his education and experience level and I would not hesitate to employ him in the future.

Sincerely

Donald K. Tibbetts
Mechanical Engineer



Applied Aerospace Research Laboratory
Mechanical, Materials and Aerospace Engineering

To: Whom It May Concern
From: Dr. Larry Chew
Subject: Recommendation of Chase Hansel

As a teaching assistant Chase has worked for me since May 2006 on both an engineering measurements class and an introductory thermo-fluids class. His role in both classes often required grading, assignment creation, and frequent teaching of lectures. During his time as the measurements TA, I put him in charge of creation of new labs, keeping up and repairing old equipment, and organizing and leading the other TAs. Once he graduated I took him on as a masters graduate student where he worked on a thesis in Microfluidics.

In all class activities performed he showed great affinity for teaching and fairness in his grading and assignments. His work with equipment in the measurements lab was integral to the class's success. On multiple instances he would work night and day and even weekends to find troubleshoot and correct any problems that occurred. When new labs had to be created, he was able to cleanly discover, purchase or invent and construct any new equipment that was required. Often these tasks would involve a variety of electrical and mechanical components to be built and assembled by Chase.

As a researcher he was able to devise his own testing procedure and test right from scratch. He worked diligently again day and night until the method of data taken was completed and every aspect of it tightly controlled to his liking. His thesis research was thorough and coupled with very clean and concise technical writing. Overall he is a highly dedicated and extremely motivated worker who will stop at nothing to tackle any problem and work on it until it is wholly and completely solved it. His strong suite is definitely in physical problem solving and anything involving equipment, but he still has enough knowledge and understanding to be able to back everything he does up with a complete theoretical picture. He has been able to do all of this with the most minimal of supervision and guidance.

I would recommend Chase as a key member for any project, be it research or otherwise. If you have any questions or concerns please contact me on my cell phone 407-924-3179 or email me at teducators@hotmail.com.

Sincerely,

A handwritten signature in blue ink that reads 'Larry Chew'.

Dr. Larry Chew
Associate Professor
University of Central Florida MMAE Dept.



Mechanical, Materials and Aerospace Engineering

To Whom It May Concern:

I have known Chase Hansel as Chair of Mechanical, Materials and Aerospace Engineering, as a mentor and instructor in graduate classes for the past 2 years. In addition, he has been teaching undergraduate measurement classes for the Department of Mechanical, Materials and Aerospace Engineering and has been the main point of contact responsible for all the undergraduate experiments related to thermal sciences, solid mechanics and other disciplines in mechanical and aerospace engineering.

Chase has also been the lead researcher in microfluidics testing and experiments, and has been helping all graduate students working in this new area of research in our department with a great deal of enthusiasm. He has worked on LabVIEW, pressure and thermal measurements, and has been a strong source of support in setting up experiments not only for his MS thesis but also for other students. Chase's work ethics and responsibility are impressive and the MMAE department has come to depend on his teaching and research efforts. As my student in Computational Fluid Dynamics, his programming and report work were thorough and well executed as well as timely.

In summary, Chase Hansel is a credit to our department and his dedication to his teaching, research and service to our department has exceeded my expectations. He would be an excellent asset to any company that employs him. It is for this, that I proudly recommend Chase Hansel for whatever goal he wishes to achieve.

Sincerely,

A handwritten signature in purple ink that reads "Ranganathan Kumar".

Ranganathan Kumar

Professor and Chair

Rnkumar@mail.ucf.edu