FENG LING

(713)666-2935 ● FLing@utexas.edu ● http://fl3537.me/
2910 Medical Arts St. Apt. 104, Austin, TX 78705

EDUCATION

B.S., Pure Mathematics and Aerospace Engineering (Astronautics) — Expected Graduation: May, 2015
The University of Texas at Austin — Cumulative GPA: 3.722/4.0

Graduate Coursework:
Stochastic Detection and Estimation; GPS Signal Processing; Finite Elements Methods;
Complex Analysis; Real Analysis; Algebraic Topology; Differential Topology;
Homotopy Type Theory*; D-modules*; Ergodic Theory*

Halliburton Business Foundations Summer Institute, McCombs School of Business — Summer 2012
CSE Certification Program, Institute of Computational Engineering and Sciences

RESEARCH

Individual Research, Institute of Computational Engineering and Sciences at UT Austin — 08/14-present
Learning and investigating applications of discrete exterior calculus for geometry processing

Undergraduate Research Assistant, Center for Space Research at UT Austin — 08/13-present
Analyzing the GRACE mission accelerometer data anomalies from thruster firing and star camera deviations
Assisting graduate students on spacecraft and mission thermal environment modeling project
Studied the geographical significance of GRACE on-board SNR and post-fit residue of the Earth gravity model

Team Member, Research Initiatives with NASA-JSC (TRICK Modeling and Simulation) — 09/10-05/11
Generated Mars rover landing graphical simulation, results presented at JSC
Developed codes based on NASA software packages (TRICK, AGEA, and EDGE)

HONORS AND ACHIEVEMENTS

Member, Aerospace Honor Society Sigma-Gamma-Tau UT Austin Chapter — 2011
Team Leader, Student Engineering Council Alternative Energy Challenge 3rd place — Fall 2010
Finalist, Intel International Science and Engineering Fair — May 2010

EXTRACURRICULAR

Participant, Directed Reading Program — 01/2014-present
Learned basic elementary modern algebraic geometry (e.g. Cohomologies and singularities)
Gave expository peer presentations on the results each semester
Befriended a handful of wonderful graduate students

Active Member, Longhorn Rocket Association — 08/11-05/14
Designed and implemented software ground station and sensor fusion for a high power (L2) rocket payload
Designed and machined model rockets from off-the-shelf components

Participant, Coursera, Udacity, and other MOOC experiences — 08/11-present
Introduced to the state of art techniques in areas of Cryptography, Software Testing,
Machine Learning, Database Management, Artificial Intelligence, etc.
Reinforced adaptive learning skills and ambition for applicable knowledge

Member, IEEE Robotics and Automation Society — 09/10-12/10
Participated in Robot-a-thon autonomous robot building competition

Volunteering Experiences: UT Austin Radionavigation Lab, Habitat for Humanity, Explore UT, Bellaire City Library, Methodist Hospital Cardiovascular and Neurosensory Nursing Units, Music Units Societies Everywhere, Bellaire Art Club

SKILLS

Proficient in UNIX/Linux (BASH scripting), MATLAB, LaTeX, MS Office Suite, GIMP, Labview, Solidworks;
Capable in Python(ipython), C, R, Fortran, Java, Multisim, OpenSCAD, Infolytica MagNet;
Fluent in Mandarin Chinese and English

EMPLOYMENT STATUS

International Student (F-1) visa, eligible for 12-month Optional Practical Training plus 17-month extension for E-verified employers