LAURA KULOWSKI

Brown University, Box 5453, Providence, RI 02912

Laura_Kulowski@brown.edu • http://laurakulowski.github.io

I. EDUCATION

2011-*Present*: BROWN UNIVERSITY

Double majoring in Mathematics and History.

Cumulative GPA: 3.83, Math GPA: 4.0, History GPA: 3.86

II. HONORS AND AWARDS

2014: GOCHMAN LINK/SEW AWARD, *received top funding award ($6,050) from Brown for summer research at Harvard with Dr. Huiqun Wang.*

2014: CHAMBLISS STUDENT POSTER AWARD HONORABLE MENTION, *received during the 223rd American Astronomical Society Meeting for Mars dust lifting research with Dr. Huiqun Wang.*

2012: KAREN T. ROMER UNDERGRADUATE TEACHING AND RESEARCH AWARD, *funding award ($3,000) from Brown for summer research in physics at Brown with Professor Humphrey Maris.*

2011-2013: SCHREIBER FAMILY BROWN UNIVERSITY ANNUAL FUND SCHOLARSHIP

2010: CONNECTICUT GOVERNOR'S SCHOLAR SEMI-FINALIST

2010: AIR FORCE MATH AND SCIENCE AWARD

III. RESEARCH EXPERIENCE

Summer 2014: STANFORD/LOCKHEED MARTIN SOLAR AND ASTROPHYSICS LABORATORY IRIS RESEARCH EXPERIENCE FOR UNDERGRADUATES (REU)

Worked with Drs. Mark Cheung and Juan Martinez-Sykora to analyze our Sun's spectral data from the Interface Region Imaging Spectrograph (IRIS). Studied Doppler velocities and spectral line widths for the quiet Sun in the transition region.

Summer 2013: HARVARD-SMITHSONIAN ASTROPHYSICAL OBSERVATORY RESEARCH EXPERIENCE FOR UNDERGRADUATES (REU)

Worked with Dr. Huiqun Wang to construct a database of locations of active dust lifting on Mars from existing Mars Daily Global Maps (MDGMs). Assessed the spatial, temporal, and size distribution of lifting areas and classified lifting events by structure.

2012-2013: BROWN UNIVERSITY DEPARTMENT OF PHYSICS

Studied the orientation and mobility of the 1P electron bubble in liquid helium under the guidance of Professor Humphrey Maris.

2010: YALE SCHOOL OF ENGINEERING AND APPLIED SCIENCE

Aided Professor Daniel E. Rosner in completing his manuscript "Thermo-diffusion Effects in Combustion for Power Production or Chemical Synthesis."

IV. PROFESSIONAL ORGANIZATIONS

2013-*Present*: MEMBER: American Astronomical Society

V. PRESENTATIONS

2014:   STANFORD UNIVERSITY SUMMER RESEARCH POSTER SESSION

2014:   AMERICAN ASTRONOMICAL SOCIETY POSTER SESSION

Gave a poster presentation of my work with Dr. Huiqun Wang on Martian dust lifting during the 223rd American Astronomical Society Meeting. Received the Chambliss Student Poster Award Honorable Mention.

2013:   SMITHSONIAN ASTROPHYSICAL OBSERVATORY ASTRONOMY INTERN SYMPOSIUM

Gave a 15-minute presentation on my work with Dr. Huiqun Wang on Martian dust lifting to members of the Harvard-Smithsonian Center of Astrophysics.

2012:   BROWN UNIVSERSITY SUMMER RESEARCH SYMPOSIUM

Gave a poster presentation of my work with Professor Humphrey Maris on electron bubbles.

VI. EXTRACURRICULAR ACTIVITIES

2012-*Present:*   BROWN UNIVERSITY MathWiSE (WOMEN IN SCIENCE AND ENGINEERING)

Organize lectures, community events, and a Girl Scouts Math Workshop to encourage females to pursue studies in the mathematical science.
Led a panel discussion on the film Girl Rising, *which focuses on gender barriers in the educational systems of developing countries.*

2012-*Present:*   BROWN UNIVERSITY MATH DEPARTMENT UNDERGRADUATE GROUP

Sponsor lectures to encourage undergraduate involvement in mathematics.
Started a weekly undergraduate tea hour in the Math Department.

2014:   LINEAR ALGEBRA GRADER

Graded and provided comments on weekly problem sets for Linear Algebra (MATH 0520).

2012-2013:   ENGINEERS WITHOUT BORDERS, BROWN STUDENT CHAPTER

Participated in a project to build latrines in Tireo, Dominican Republic.

2011-2012:   ALGEBRA IN MOTION

Tutored high school students in mathematics and science.

VII. SKILLS

ACADEMIC: Strong problem-solving and research skills; comfortable in unstructured academic settings that encourage independent thinking.

COMPUTER: Comfortable with Linux, Macintosh, and PC; experience with Mathematica, MATLAB, LaTeX, IDL, and Python.

LANGUAGES: French (conversational)