David Scripka

(xxx) xxx xxxx | david.scripka@gmail.com | www.davidscripka.com | Atlanta, GA

Education

PhD MATERIALS SCIENCE AND ENGINEERING
4.0 GPA - Georgia Institute of Technology - Atlanta, GA (2017)

B.S. MATERIALS SCIENCE AND ENGINEERING
3.9 GPA - Georgia Institute of Technology - Atlanta, GA (2012)

Work Experience

GRADUATE RESEARCH ASSISTANT – *Georgia Institute of Technology -Atlanta, GA - Jan 2013 to present*

- **Designed and conducted novel experiments** with high-energy lasers and advanced optical sensors to study material behavior
- **Designed and performed complex multi-physics simulations** to predict real-world material behavior observed in experiments

NATIONAL SECURITY DIVISION ANALYST – *Congressional Budget Office - Washington, DC - June to Aug 2016*

- **Independently performed a comprehensive risk analysis** of the vulnerability of the US electric grid to cyber-attacks
- **Organized and summarized analysis methods, results, and conclusions** in detailed oral and written reports

ENERGETIC MATERIALS INTERN – *Lawrence Livermore National Laboratory - Livermore, CA - May to Aug 2012*

- **Evaluated and tested an empirical material behavior model** by comparing simulation predictions to experimental data
- **Identified and corrected an unknown inaccuracy** in a material model by mathematically reformulating a key model input

UNDERGRADUATE RESEARCH ASSISTANT – *Georgia Institute of Technology - Atlanta, GA - Nov 2010 to Dec 2012*

- **Characterized the structure and experimentally tested** the mechanical behavior of a novel aluminum/steel composite armor
- **Performed multi-physics simulations of high speed aluminum extrusion** to identify important effects in rail-gun launch systems
- **Applied multiple electron microscopy methods to identify chemical reactions** in shock-compressed nickel/aluminum nano-foils
- **Simulated micrometer scale interactions in granular-type materials** to evaluate the effectiveness of microscopic sensors

INTERIOR MATERIALS INTERN – *General Motors Corporation -Warren, MI - May to Aug 2011*

- **Planned, coordinated, and directed a large-scale field inspection** of used vehicles to evaluate real-world material performance
- **Performed large-scale mechanical wear testing** of molded plastic materials to evaluate intrinsic durability of different designs
- **Designed and programmed an automated Microsoft Excel spreadsheet** to validate material property data in digital databases

Leadership and Service

GRADUATE STUDENT BODY PRESIDENT – *Georgia Institute of Technology - May 2016 to present*

- Primary representative and advocate for 6,500+ graduate students, working extensively with senior Faculty and Administrators

VOLUNTEER CONSULTANT – *Community Consulting Teams (CCT) Atlanta - Atlanta, GA - 2016 to present*

- Worked in a diverse team of professionals and students to revise the policy and procedures manual for a non-profit health clinic

STUDENT MENTOR – *MSE Student Mentor Program - Georgia Institute of Technology - Atlanta, GA - 2015 to 2016*

- Personally mentored multiple undergraduate students, advising on academic issues, professional goals, and career plans

FINANCIAL ACCOUNTANT – *Harbour East Asia – 2015 to 2016*

- Maintained financial records for 501(c)(3) non-profit organization, advised on long-term program and financial strategies

BOARD MEMBER – *MSE Graduate Student Advisory Group - Georgia Institute of Technology - Atlanta, GA - 2014 to 2015*

- Advised the Department Administrators on policy changes, and helped organize a poster competition with $10,000 in awards

Formal Communication - Honors and Awards - Skills

ORAL PRESENTATIONS
3 international conference talks
20+ formal talks at misc. events

POSTER PRESENTATIONS
4 international conference posters
8+ posters at misc. events

PAPERS
3 First-author peer-reviewed publications
2 supporting author peer-reviewed publications

AWARDS
ASEE NDSEG Fellowship
Georgia Tech President's Fellowship
Georgia Tech Federal Jackets Fellowship
5 Poster Awards, **3** Student Travel Awards, **10+** Academic Awards

SKILLS
Programming Languages
R, Python, LaTeX, MATLAB, Javascript, HMTL/CSS, VBA, Bash, C++, SQL

Communication
Public Speaking, Technical Writing

Office Productivity
Microsoft Office (Word/Powerpoint/Excel), Windows 7/8/10, Linux/Unix

Data Analytics Software
RStudio, Excel, Tableau, SAS