

David G Underhill

david.g.underhill@gmail.com

EDUCATION

Stanford University *2007-Present*

- M.S. Computer Science, expected June 2009

United States Naval Academy *2003-2007*

- B.S. Computer Science, graduated with distinction (3.82 overall GPA, 4.00 major GPA)

Computing Experience – C++, Java, MySQL, OpenGL, PHP, Visual Basic; *nix, Windows

RESEARCH, PRESENTATIONS, AND AWARDS

IEEE Information Reuse and Integration 2007, Las Vegas, NV *July 2007*

- Presented *Enhancing Text Analysis via Dimensionality Reduction*
(pdf: http://www.dound.com/papers/2007-Enhancing_Text_Analysis_via_Dimensionality_Reduction.pdf)
(slides: http://www.dound.com/papers/2007-IRI_slides.ppt)

Trident Scholar: Exploring Dimensionality Reduction for Text Mining *2006-2007*

- One of fourteen scholars. Researching the effects of dimensionality reduction on a corpus of documents and how faithfully they represent the relationships between documents.

(pdf: http://www.dound.com/papers/2007-Exploring_Dimensionality_Reduction_for_Text_Mining.pdf)

(slides: http://www.dound.com/papers/2007-Trident_slides.ppt)

(poster: http://www.dound.com/papers/2007-Trident_poster_lowres.jpg)

National Science Foundation Graduate Fellowship Honorable Mention *March 2007*

SANSFIRE Conference 2006, Washington, DC *July 2006*

- Speaker on the NSA-organized panel for “Cyber Defense Exercise – Lessons Learned”

LEADERSHIP POSITIONS

Brigade Midshipmen Information Liaison Officer *Fall 2006-2007*

- Developed and coordinated information systems utilized by the 4,000+ member brigade including introducing TV-over-IP, monitoring usage and problems with IT systems, creating a new webpage for the brigade, and developing a tool which could parse scheduling information for adjutant officers

Upsilon Pi Epsilon Vice President *Fall 2006-2007*

- Computer Science honor society Vice President at the United States Naval Academy

Plebe Summer Squad Leader *Summer 2006*

- Successfully led 10 new students through their initial military indoctrination

Cyber Defense Exercise Leader *Spring 2006*

- Led 40 peers to design & defend a network against NSA attacks in an intraservice academy competition

INTERNSHIPS

Naval Surface Warfare Center Dahlgren Division, Dahlgren, VA *Summer 2006*

- Learned about dimensionality reduction and implemented text mining tools for my Trident research. Self-taught linear algebra to understand the details of the algorithms.

Lawrence Livermore National Laboratory, Livermore, CA *Summer 2005*

- Worked with a team of nuclear physicists to contribute to a thermal radiation transport module and implemented an opacity server for COSMOS++, a magnetohydrodynamics simulator. Also improved the thermal transport simulation so a time step of ran in minutes instead of a day.

VOLUNTEERING

Dound System *2004-2006*

- Single-handedly and without prompting developed a software system used by over 1,000 Academy users to improve the efficiency of administrative tasks within the student body. The Academy’s leadership placed it on its priority list for review and implementation across the whole student body.

Midshipmen Group Study Program Leader/Tutor *2005-2006*

- Instructed groups of students on a weekly basis in Calculus and Computer Science