

# David J. Liedtka III

Knight-Hennessy Scholar, Naval Officer

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Computer scientist and experienced computer programmer interested in artificial intelligence, machine learning, and natural language processing. Current member of the inaugural cohort of Knight-Hennessy Scholars at Stanford University. Cryptologic Warfare Officer in the U.S. Navy and 2018 graduate of the United States Naval Academy.

## Education

- United States Naval Academy  
B.S., Computer Science and Information Technology (dual major), May 2018  
Academic Order of Merit: 1 / 1062 GPA: 4.0 / 4.0  
Overall Order of Merit: 7 / 1062 Graduated with distinction  
Military Order of Merit: 17 / 1062
- Stanford University  
M.S., Computer Science (artificial intelligence concentration), expected June 2020

## Awards and Achievements

- Knight-Hennessy Scholar Feb 2018 - Present
  - One of 51 selected (out of 3,601 applicants) as a member of the inaugural cohort of Knight-Hennessy Scholars at Stanford University. Currently pursuing an M.S. in Computer Science at Stanford.
- Rhodes Scholarship Finalist, District 2 Nov 2017
- Trident Scholar Apr 2017 – May 2018
  - One of 13 midshipmen selected for USNA's most prestigious independent research program. Advised by Professor Luke McDowell, completed a project titled *Prediction of Regional Voting Outcomes Using Heterogeneous Collective Regression*, which applied new machine learning strategies to make more reliable election predictions.
- Chief of Naval Operations Distinguished Midshipman Graduate May 2018
- Admiral William S. Sims Memorial Award May 2018
  - For proficiency in Computer Science, as the graduate with the highest grades in classes required to complete the Computer Science major.
- Patriot League Academic Honor Roll 2015-2018
  - Four time honoree on the Patriot League Academic Honor Roll. Competed as a javelin thrower on the Naval Academy Men's Track and Field Team.
- Cultural Immersion and Training Trip to Brazil June 2017
  - One of six midshipmen selected to travel to Rio de Janeiro, Natal, Alto Paraíso de Goiás, and Brasília in order to learn about the Brazilian culture and to interface with the Brazilian Navy and the Brazilian Naval Academy, Escola Naval.
- Additionally, a 7x member of the Superintendent's List and the Commandant's List, and a member of Phi Kappa Phi and Upsilon Pi Epsilon.

## Work Experience / Leadership Positions

- Cryptologic Warfare Officer, U.S. Navy May 2018 – Present
  - Current rank is Ensign. Worked in the Computer Science Department at the Naval Academy, contributing to several programming projects, following graduation. Awaiting next assignment to follow graduate school.
- Intern, National Security Agency Summer 2016
  - Worked in Tailored Access Operations. Assisted developing added functionality to an exploit framework used to facilitate initial access to a target.
- Intern, Maui High Performance Computing Summer 2017
  - Researched expanding Link-Based Classification, an existing Machine Learning strategy, to Heterogeneous Collective Regression, a new strategy enabling predictions over more diverse datasets.
- Company Commander, 22<sup>nd</sup> Company May 2017 – Dec 2017
  - Served in command of the Naval Academy's 22nd Company, a group of about 150 midshipmen. Was responsible for the organization, well-being, and efficiency of the company day-to-day.
- Vice President, Phi Kappa Phi May 2017 – May 2018
  - Served as vice president of the Naval Academy's chapter of Phi Kappa Phi, the national honor society.

## Publications

All publications are available on my personal website, [davidliedtka.com](http://davidliedtka.com)

- *Fully Heterogeneous Collective Regression*. David J. Liedtka and Luke K. McDowell. The 5<sup>th</sup> IEEE International Conference on Data Science and Advanced Analytics (IEEE DSAA 2018), October 2018.
- *Fully Heterogeneous Collective Regression*. David J. Liedtka and Luke K. McDowell. 14<sup>th</sup> Annual Workshop on Mining and Learning with Graphs (MLG 2018), The 24<sup>th</sup> ACM SIGKDD Conference on Knowledge Discovery and Data Mining (KDD 2018), August 2018.

## Computer Languages

- |              |            |
|--------------|------------|
| ▪ Python     | ▪ PHP      |
| ▪ Java       | ▪ SQL      |
| ▪ C++        | ▪ MATLAB   |
| ▪ C          | ▪ Bash     |
| ▪ C#         | ▪ Assembly |
| ▪ F#         | ▪ HTML     |
| ▪ JavaScript | ▪ CSS      |
| ▪ Scheme     |            |

## Test Scores

- ETS Computer Science Major Field Test – 181 (97<sup>th</sup> percentile), highest score amongst all computer science majors in USNA's Class of 2018