

Courtney Thurston

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Education

Embry-Riddle University, Daytona Beach, May 2019

Honors Program (3.541 CGPA), **B.S. Computer Science & B.S. Computational Math (Physics track)**

High School Valedictorian (1/925), June 2015

Work Experience

Microsoft – Seattle, WA

Summer 2017

Software Engineering Intern – Data Group (Software Engineering)

Microsoft – Seattle, WA

Summer 2016

Explorer Intern – Data Group (Software Engineering)

- Developed internal development tools in C# for internal big data platforms.
- Developed a stream analytics ‘playground’ for new customers in C#.

Embry-Riddle Aeronautical University – Daytona Beach, FL

Present

Undergraduate Research Assistant (Software Engineering)

- Supporting unmanned systems research through the ASSURE Center of Excellence.
- Developing and managing the website for the Women’s Engineering Institute.

Space Exploration Technologies (SpaceX) – Hawthorne, CA

Summer 2015

Intern – Propulsion & Structures/Vehicle Engineering (Hardware Engineering)

- Designed tooling for flight-critical Falcon 9 rocket hardware and managed subsets of certification articles as a member of the Crew Dragon spacecraft structural certification team.

Northrop Grumman Corporation – Rancho Bernardo, CA

Spring 2015

Intern – High Altitude Long Endurance (HALE) Unmanned Systems (Systems Engineering)

- Evaluated program efficacy of the High Altitude Long Endurance unmanned systems.

Near Earth Autonomy, Carnegie Mellon University – Pittsburgh, PA

Summer 2014

Intern – General Robotics Systems (Hardware Engineering, Systems Engineering)

- Modeled mounting positions for a LiDAR sensor on a light military helicopter using Solidworks.
- Performed occlusion studies/V&V tests and compiled a report for internal R&D.

Technical Skills

Java, C, C#, Git, PowerShell, Visual Studio

Hackathons, Competitions, and Programs

- Google CodeU

Participated in Google’s invite-only talent development program for high potential freshman and sophomore technical candidates. Completed a data structures and algorithms online curriculum, developed a small search engine and implemented TF-IDF in Java.

- MangoHacks 2016
- MHacks: Refactor 2016
- SwampHacks 2016 (Best Use of Amazon Web Services, 3rd Place All-Around)
- Qualcomm WCC Hackathon 2015
- The Port Hackathon at CERN 2014 (project acquired by UN); November 2014
- FIRST Robotics Competition (Rules and PR Leads); September 2014 – June 2015
Lenepe-Seneca District Champions
- Unmanned Systems RWDC (Team Lead); September 2011 – June 2015
2x National Finalist Second-Place team (2/50), 4x Pennsylvania State Champions

Scholarships

AXA Achiever

Brad Feld Scholar

Burger King Scholar

Coca-Cola Scholar

Cooke Scholar

EAA Scholar

Eaton Scholar

Elks Scholar

FIRST Scholar

GE-Reagan Scholar

Presidential Scholar

SanDisk Scholar

Space Club Scholar

VIP WIT Scholar

Woman of Excellence

2x ABI GHC Grant

Facebook GHC Grant

Taser Intl GHC Grant

Microsoft GHC Grant

Google GHC Grant

2x Google SWE Grant

Keds Grant

Thurston, Courtney. "Simulation and Modeling of Unmanned Systems for Humanitarian Applications." Submitted for presentation at AUVSI's Unmanned Systems 2015 Conference. Atlanta, GA. May 2015. Poster Presentation.

Thurston, Courtney. "Simulation and Modeling of Unmanned Systems for Humanitarian Applications in Industry." Accepted for presentation at the Society for Industrial and Applied Mathematics' Conference on Computational Science and Engineering. Salt Lake City, UT. March 2015. Poster Presentation.

Thurston, Courtney. "Unmanned Systems Applications." Submitted for presentation at SIGCSE 2015. Kansas City, KS. March 2015. Lightning Talk.

Thurston, Courtney. "Unmanned Systems Simulation and Modeling for Humanitarian Applications in Industry and Academia." Submitted for presentation at SIGCSE 2015. Kansas City, KS. March 2015. Poster Presentation.

Thurston, Courtney. "Unmanned Systems for Humanitarian Applications in Industry." Submitted for presentation at the ACM Richard Tapia Celebration of Diversity in Computing Conference. Boston, MA. February 2015. Poster Presentation.

Thurston, Courtney. "Unmanned aerial vehicles with humanitarian purpose." Grace Hopper Celebration of Women in Computing. Phoenix Convention Center, Phoenix, AZ. October 2014. Poster Presentation.

Thurston, Courtney. "Unmanned aerial systems with humanitarian purpose." World Maker Faire. New York Hall of Science, New York City, NY. September 2014. Featured Speaker.

Thurston, Courtney. "Unmanned aerial systems with humanitarian purpose." World Maker Faire. New York Hall of Science, New York City, NY. September 2014. Exhibition.

Thurston, Courtney. Women in Computing Day. Next Century Corporation, Columbia, MD. June 2014. Keynote Address.

Etzwiler, D., **Thurston, C.**, Sethi, R., Bomkamp, K. "STEM Competitions: A Closer Look by STEMconnector." STEMconnector Town Hall. Featured Speaker.

Thurston, Courtney. White House Safety Datapalooza. United States Department of Agriculture, Washington, DC. January 2014. Invited Attendee.

Allison, M., Bradmon, J., **Thurston, C.**, Knuth, S. PA Families for Public Cyber Schools Press Conference. Capitol Rotunda, Harrisburg, PA. November 2013. Featured Speaker.

Thurston, Courtney. Pennsylvania Senate Education Committee hearing. Harrisburg University of Science and Technology, Harrisburg, PA. October 2013. Featured Speaker.

Thurston, C., Antonio-Whipkey, J., Slaughaupt, D. FY14 Real World Design Challenge Kickoff Event. PricewaterhouseCoopers, Washington, DC. October 2013. Featured Speaker.

Kao, A., **Thurston, C.**, Antonio-Whipkey, J., Slaughaupt, D., Ciora, R., Cavanaugh, I., Amelotte-Myers, A. "An unmanned aerial system for search and rescue." FY13 Real World Design Challenge United States National Championships. Washington, DC. April 2013. Competitive Presentation.

Thurston, Courtney. "An unmanned aerial system for search and rescue." Tech America's Faith in America's Future Presidential Inauguration Brunch. Microsoft Research, Washington, DC. January 2013.

Kao, A., **Thurston, C.**, Antonio-Whipkey, J., Slaughaupt, D., Ciora, R., Holmes, D., Nester, M. "A light sport aircraft for cross-country flight." FY12 Real World Design Challenge United States National Championships. Washington, DC. April 2012. Competitive Presentation.