

# Jack Baumann

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## EDUCATION

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| Class of 2019 | <b>University of Dallas</b> , Irving, TX<br><i>Bachelor of Science in Computer Science</i>                   |
| Class of 2015 | <b>Clear Lake High School</b> , Houston, TX<br><i>Graduated Magna Cum Laude on the Distinguished Program</i> |

## WORK EXPERIENCE

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| May 2018 – Present | <b>Software Engineering and GIS Intern</b> , Jeppesen, a Boeing Company, Englewood, CO <ul style="list-style-type: none"><li>• Worked on the GIS Development team at Jeppesen and collaborated with other teams worldwide.</li><li>• Maintained and upgraded a suite of Java applications.</li><li>• Created Python (2.7 and 3) and ArcPy scripts to update, access, and map geodatabases, automate software testing, and implement new features.</li><li>• Wrote SQL queries and statements.</li><li>• Used ESRI technologies like ArcMap, ArcCatalog, ArcPy, shapefiles, and geodatabases.</li><li>• Developed, documented and maintained architectures, requirements, algorithms, databases, interfaces and designs for software systems.</li><li>• Worked with Software Test Engineers and Requirements Engineers to implement, design, and satisfy user requirements.</li><li>• Participated in Program Increment Planning (part of Scaled Agile) and requirements reviews to plan upcoming features and review their requirements.</li><li>• Drafted design documents, release notes, and flow/logic diagrams for new algorithms and features.</li></ul> |
| June – August 2015 | <b>Software Engineering Intern</b> , AtLink Communications, Houston, TX <ul style="list-style-type: none"><li>• Collaborated with a team of two fellow interns to design and develop a database, a web application, and an Android application based on the requirements and feedback from a client.</li><li>• The At811 project allows users to view and filter the locations of utility lines using a Google Maps interface and an augmented reality camera overlay.</li></ul>   |

## RESEARCH

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| August 2018 – Present | <b>Navigation Algorithms</b> , with Michael Bolot and Dr. David Andrews at the University of Dallas, Irving, TX<br>The goal of this research project is to improve existing pathfinding technologies by implementing newer pathfinding algorithms (particularly A*) and improving them to account for finer details such as the variance in traffic within different lanes on a road. |
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## PROJECTS

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Links to and descriptions of my personal, school, and hackathon projects can be found at: <http://jackbaumann.us/projects.html>

## ACTIVITIES AND LEADERSHIP

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### Association of Computing Machinery International Collegiate Programming Competition

I practiced with and competed on a programming team for the South-Central USA Regional Qualifier each year from 2015-2018. In this contest, teams of 3 are given 11-12 problems and 5 hours to solve as many as possible without access to the internet. The problems have memory and time limits and heavily test a team's knowledge of and ability to implement and modify varying algorithms. The contest is open to teams from colleges across Texas, Oklahoma, and Louisiana.

2018 leaderboard (UD1 – 13<sup>th</sup> place out of 71 teams): <https://scusa18.kattis.com/standings/>

2017 leaderboard (UD1 – 27<sup>th</sup> place out of 76 teams): <http://ld2017.scusa.lsu.edu/scoreboard-regional/>

2016 leaderboard (UD1 – 22<sup>nd</sup> place out of 68 teams): <http://ld2016.scusa.lsu.edu/scoreboard-regional/>

### University of Dallas Student Chapter of the Association of Computing Machinery (ACM)

From 2015-2018 I have held officer positions as the Treasurer, Secretary, and Vice Chair in the UD Computer Club. As an officer I have planned events and fundraisers, led meetings, and filled out paperwork. Our ACM Chapter coordinated together on programming projects, organized hackathons and competitions, and gave presentations on computer hardware and programming topics.

### Business Professionals of America

As a competitor from 2013-2015, I attended two regional, one state, and one national Leadership Conferences.

- Placed second at Nationals in Software Engineering Team in 2015

## **UIL Computer Science**

I competed on my High School's UIL computer science team from 2013-2015.

## **Boy Scouts**

I earned the Eagle Scout Award in 2014 from Troop 595 and served as Senior Patrol Leader in the Fall of 2013. I am currently an Assistant Scoutmaster for Troop 595.

## **AWARDS, HONORS, AND ACHIEVEMENTS**

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| <b>Fall 2017</b>   | University of Dallas Honor Roll ( <a href="https://meritpages.com/jackbaumann">https://meritpages.com/jackbaumann</a> ) |
| <b>Spring 2017</b> | University of Dallas Honor Roll   |
| <b>Fall 2016</b>   | University of Dallas Dean's List  |
| <b>Spring 2016</b> | University of Dallas Honor Roll   |
| <b>Fall 2015</b>   | University of Dallas Honor Roll   |
| <b>2015</b>        | AP Scholar with Distinction – College Board   |
| <b>2014</b>        | Eagle Scout – Boy Scouts of America Troop 595   |

## **SKILLS**

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**Proficient in:** Java, Python, SQL, HTML, CSS, Git, ESRI, ArcPy, ArcGIS, Google Maps

**Worked in:** C, Swift, iOS, Android, Racket, Lisp, AWS, Sage, Rust, JavaScript, NodeJS, AngularJS