

# Samuel Todd Flanagan

toddflan.github.io

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|                     |  |  |                            |                           |
|---------------------|--|--|----------------------------|---------------------------|
| <b>OBJECTIVE</b>    | <b>Seeking employment in autonomous vehicles, data science, or related fields</b>  |  |                            |                           |
| <b>EDUCATION</b>    | <b>Texas A&amp;M University</b>   College Station, TX  |  |                            |                           |
|                     | MS   Computer Engineering  | BS   Electrical Engineering            |                            |                           |
|                     | Research   Autonomous Vehicle Localization   | Minors   Computer Science, Mathematics |                            |                           |
|                     | GPA   3.857  | GPA   4.0                              |                            |                           |
|                     | Dec. 2020  | May 2018                               |                            |                           |
| <b>PUBLICATIONS</b> | <b>Localization in Autonomous Vehicles Using a Generalized Inner Product</b>   |  |                            | IEEE GlobalSIP 2019       |
|                     | <i>S. T. Flanagan, D. K. Khublani, J.-F. Chamberland, S. Agarwal, A. Vora</i>  |  |                            |                           |
|                     | <ul style="list-style-type: none"><li>Applied signal processing techniques to improve localization, especially in harsh conditions</li><li>Supported by Ford Motor Company</li></ul>   |  |                            |                           |
| <b>COURSES</b>      | <b>Vector Space Methods</b>  | <b>Applied Info. Science</b>           | <b>Convex Optimization</b> | <b>AI Tech. and Apps.</b> |
| <b>SKILLS</b>       | <b>Python</b>  | <b>C++, C</b>                          | <b>C#</b>                  | <b>Linux</b>              |
| <b>EXPERIENCE</b>   | <b>Texas A&amp;M University</b>   College Station, TX  |  |                            | Jan. 2019 – Present       |
|                     | <i>Research Assistant (Spring 2019), Graduate Student Worker</i>   |  |                            |                           |
|                     | <ul style="list-style-type: none"><li>Proposed novel improvements to localization algorithms</li><li>Developed a noise model for image acquisition in autonomous vehicles</li><li>Wrote numerical simulations in Python to evaluate algorithmic improvements</li></ul> |  |                            |                           |
|                     | <b>Tanknology Inc.</b>   Austin, TX  |  |                            | July – Nov. 2018          |
|                     | <i>Product Development Engineer</i>  |  |                            |                           |
|                     | <ul style="list-style-type: none"><li>Developed audio-based leak detection software for the VacuTect® system</li><li>Built a Universal Windows Platform application in C#</li></ul>  |  |                            |                           |
|                     | <b>United States Department of Defense</b>   |  |                            | May – Aug. 2017           |
|                     | <i>Splunk Developer (TS SCI Clearance)</i>   |  |                            |                           |
|                     | <ul style="list-style-type: none"><li>Promoted data-driven decision making through the creation of effective Splunk dashboards</li><li>Created multiple CSS files allowing developers to quickly improve dashboard design</li></ul>                                    |  |                            |                           |
|                     | <b>musx</b>   Austin, TX   |  |                            | June – Aug. 2016          |
|                     | <i>Product Development Intern</i>  |  |                            |                           |
|                     | <ul style="list-style-type: none"><li>Learned cross-platform mobile development in JavaScript using React Native</li><li>Developed a comprehensive mobile application beta test strategy</li></ul>   |  |                            |                           |
|                     | <b>L-3 Communications</b>   Greenville, TX   |  |                            | May – Dec. 2015           |
|                     | <i>Electrical Engineering Co-op (S Clearance)</i>  |  |                            |                           |
|                     | <ul style="list-style-type: none"><li>Designed, fabricated, and installed instrumentation testing systems</li><li>Contributed to electrical design of aerospace mission systems</li></ul>  |  |                            |                           |
| <b>ACTIVITIES</b>   | <b>National Instruments</b>   Austin, TX   |  |                            | June – Aug. 2014          |
|                     | <i>Test Engineering Intern</i>   |  |                            |                           |
|                     | <ul style="list-style-type: none"><li>Updated production testing software for three adapter modules</li></ul>  |  |                            |                           |
|                     | <b>IBM Senior Assistant (EE Capstone Project)</b>   Java, C++, Python  |  |                            | Fall 2017 – Spring 2018   |
|                     | <ul style="list-style-type: none"><li>Small companion robot designed to keep the elderly safe</li><li>Fall detection, Android app, TCP, Bluetooth, medication reminders</li></ul>  |  |                            |                           |
|                     | <b>Texas A&amp;M Climbing Team</b>   USAC Collegiate Climbing Series   |  |                            | Feb. 2016 – Present       |
|                     | <ul style="list-style-type: none"><li>President, 2019-20</li><li>2019 Overall Regional Team Champions</li></ul>  |  |                            |                           |
|                     | <b>Eagle Scout</b>   Boy Scouts of America   |  |                            | Oct. 2013                 |