Samuel Todd Flanagan

toddflan.github.io toddflanagan.web@gmail.com

OBJECTIVE **Seeking employment in autonomous vehicles, data science, or related fields**

EDUCATION

Texas A&M University | College Station, TX

MS | Computer Engineering
Research | Autonomous Vehicle Localization
GPA | 3.857
May 2021

BS | Electrical Engineering
Minors | Computer Science, Mathematics
GPA | 4.0
May 2018

PUBLICATIONS

Enhanced Normalized Mutual Information for Localization in Noisy Environments IEEE ASPCON 2020
S. T. Flanagan, D. K. Khublani, J.-F. Chamberland, S. Agarwal, A. Vora

- Applied signal processing techniques to improve localization, especially in harsh conditions
- Supported by Ford Autonomous Vehicles LLC

Localization in Autonomous Vehicles Using a Generalized Inner Product IEEE GlobalSIP 2019
S. T. Flanagan, D. K. Khublani, J.-F. Chamberland, S. Agarwal, A. Vora

COURSES **Vector Space Methods** **Applied Data Science** **Convex Optimization** **AI Tech. and Apps.**

SKILLS **Python** **C++, C** **C#** **Linux**

EXPERIENCE

Texas A&M University | College Station, TX Jan. 2019 – Present
Research Assistant (Spring 2019), Graduate Student Worker

- Proposed novel improvements to localization algorithms
- Developed a noise model for image acquisition in autonomous vehicles
- Wrote numerical simulations in Python to evaluate algorithmic improvements

Tanknology Inc. | Austin, TX July – Nov. 2018
Product Development Engineer

- Developed audio-based leak detection software for the VacuTect® system
- Built a Universal Windows Platform application in C#

United States Department of Defense May – Aug. 2017
Splunk Developer (TS SCI Clearance)

- Promoted data-driven decision making through the creation of effective Splunk dashboards
- Created multiple CSS files allowing developers to quickly improve dashboard design

musx | Austin, TX June – Aug. 2016
Product Development Intern

- Learned cross-platform mobile development in JavaScript using React Native
- Developed a comprehensive mobile application beta test strategy

L-3 Communications | Greenville, TX May – Dec. 2015
Electrical Engineering Co-op (S Clearance)

- Designed, fabricated, and installed instrumentation testing systems
- Contributed to electrical design of aerospace mission systems

National Instruments | Austin, TX June – Aug. 2014
Test Engineering Intern

- Updated production testing software for three adapter modules

ACTIVITIES

IBM Senior Assistant (EE Capstone Project) | Java, C++, Python Fall 2017 – Spring 2018

- Small companion robot designed to keep the elderly safe
- Fall detection, Android app, TCP, Bluetooth, medication reminders

Texas A&M Climbing Team | USAC Collegiate Climbing Series Feb. 2016 – Present

- President (2019-20), 2019 Overall Regional Team Champions

Eagle Scout | Boy Scouts of America Oct. 2013