

Adam Benabbou

V19.8.12

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EDUCATION

Master of Science in Aerospace Engineering
Bachelor of Science in Aerospace Engineering
The University of Alabama, Tuscaloosa, AL
Minor: Randall Research Scholars Program
The American School of Tangier

August, 2020 **GPA: 4.0/4.0**
May, 2019 – *Summa Cum Laude*

May, 2015 – *Valedictorian*

TECHNICAL EXPERIENCES

June 2019 – August 2019

Special Projects Intern – Scout Energy Partners

- Conducted market research into drone and sensor technologies in the energy industry, performed extensive research into current company operations and identified opportunities for potential improvements
- Proposed to Senior Leadership a drone-based solution to significantly improve leak detection process of assets and developed a detailed plan for testing practicality of proposal
- Contracted a drone service company after a thorough bidding process, conducted a proof-of-concept test, and proposed future steps for continuity of the project.
- Coded a web-based oil and gas actuals visualization tool using C# ASP.NET MVC Framework

Fall 2018 – Spring 2019

Systems Integration Lead/Flight Control Engineer – Project Hydrofly, The University of Alabama

- Coded a physics-based simulation in MATLAB and identified several design requirements/considerations in the early stages of the project
- Developed a propulsion method to vary thrust output of the system for hovering capabilities
- Designed the control system architecture and spearheaded the development effort for the Control Team
- Coded the flight control system for the vehicle's VTVL flight mission
- Implemented PID controllers, object-oriented programming, Hardware-in-the-loop testing, Software-in-the-loop testing, threading, raspberry-pis, ultrasonic-sensors, and pressure-sensors

May 2018 – July 2018

Summer Research Intern – Aoki & Yokozeki Laboratory, The University of Tokyo

- Characterization of cyclic behavior of flexible skin for morphing application
- Coded optical measurement technique in MATLAB for quantifying engineering strain

Fall 2016 – Spring 2018

Undergraduate Research Assistant – Aircraft Rapid Prototyping Laboratory, The University of Alabama

- Developed an aircraft missions simulation and analysis project using STK and MATLAB
- Designed/built/flew a 36-inch span dual ailerons model airplane wing for autonomous systems testing
- Developed and tested feasibility of Inertial Navigation System using low-cost components

Spring 2016 – Spring 2019

Lab Manager – Randall Research Scholars Program, The University of Alabama

- Managed the computer lab's Linux servers, 3D printers, and network inventory and security
- Provided technical support for members of RRSP and faculty of the Honors College

SKILLS

Programming: MATLAB, Fortran, C, C++, C#, Python, Bash, SQL, AutoIt, HTML, CSS, JavaScript
Systems and Software: STK, Arduino IDE, VI/VIM, Linux OS, Windows OS, Autodesk Inventor, SolidWorks, MSC Nastran/Patran, MS Visual Studio, GIMP

Languages:

- **English** – Native Proficiency
- **Japanese** – Limited Working Proficiency
- **French** – Native Proficiency
- **Spanish** – Elementary Proficiency

HONORS AND AWARDS

- Graduate Council Fellowship; 2019
- Randall Research Scholars Fellowship; 2018
- H.H. Chapman Award; 2018
- 3rd place at AGI EAP Grant Competition using the Systems Tool Kit; 2017
- George P. Kalv Scholarship; 2019
- Student Government Association Research Grant; 2018
- Tuscaloosa International Friends Scholarship Award; 2017