# Arnold M. Schaefer

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### EDUCATION

Florida State University, Tallahassee, Florida Masters of Science, Mechanical Engineering

Florida State University, Tallahassee, Florida Bachelors of Science, Mechanical Engineering Class Rank: 3 of 107 - Summa Cum Laude

#### INTERNSHIPS

**Danfoss Turbocor**, Tallahassee, Florida Aero-Thermal Engineering Intern

- Modeled compressor prototype assemblies in SpaceClaim and CATIA to be used for testing and feasibility analysis with CFD simulation.
- Developed a C++ algorithm to expand current test data contours for compressor performance in order to help identify performance characteristics in untested areas.
- Designed and tested new inlet guide vanes using CFD tools from ANSYS in order to increase compressor efficiency by ensuring that flow enters the compressor impeller at the correct angle.

## **ZF Powertrain Modules**, Saltillo, Coahuila, MEX

International Engineering Intern

- Utilized Value Stream Mapping tools to identify production line bottlenecks by determining hourly outputs, cycle times, and material/information flow.
- Worked in a task force consisting of German and Mexican engineers and toolmakers to discover and address production problems in the press shop to ensure parts were manufactured within specification.

#### PROJECTS

#### Senior Capstone Project

- Designed and constructed a robust camera monitoring system for compressor inlet guide vanes which met all project goals and was fully tested and validated.
- Acted as team leader to ensure all project deadlines were met, that there was constant communication with the project sponsor and that all team work was conducted in a timely and efficient manner.

#### Mechatronics Project

• Developed C algorithm to control home window shades automatically using a Dragon-12 board with DC motors, stepper motors and light sensors to regulate the light in the room and keep it constant.

### TECHNICAL SKILLS AND CERTIFICATIONS

Software:	Microsoft Office Suite, MathCad, Pro-Engineer CREO, CATIA, Autodesk AutoCAD,
	Autodesk Inventor, Space Claim, ANSYS CFD Tools, ANSYS Workbench
Programming:	$ET_EX$ , MATLAB, C++, Python, HTML and CSS
Languages:	Fluent German, Fluent English, Intermediate Spanish
Diplomas:	International Baccalaureate (IB) Diploma with Honors
Certifications:	Autodesk AutoCAD Certification ( $\#$ 00110215) Autodesk Inventor Certification ( $\#$ 00115889)

GPA: 4.00 August 2014 to May 2018 GPA: 3.91

August 2017 to May 2019

May 2017 to August 2017

August 2017 to May 2018

November 2017 to December 2017

May 2016 to June 2016