# **Shaun Gilliam**

**Aerospace & Mechanical Engineer** 

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Innovative Mechanical and Aerospace engineer with 10+ years of combined experience in engineering and software. Able to independently identify a need, quickly investigate / learn new skills, then apply them to solve problems.

# PROFESSIONAL EXPERIENCE

### AEROSPACE ENGINEER

### GECKO LABS • 8/17 - PRESENT

TASKS / ACCOMPLISHMENTS:

- Founded Gecko Labs as a self-owned small business.
- Developed novel cylindrical rotor propulsion system for unmanned aerial vehicle.
- Programmed and simulated CNC machining of components for in-house rapid prototyping.
- Modeled thermal elements for road-heating power generation study.

### MECHANICAL ENGINEER

#### SIGNATURE RESEARCH INC. • 3/16 - 8/17

TASKS / ACCOMPLISHMENTS:

- Developed a unique simulation and analysis tool directly tying engineering results to mission outcomes, providing quantifiable cost/benefit comparisons of 6 competing technologies.
- Modeled vehicle dynamics and suspension system for next generation military vehicle.
- Led the three members of the mobility analysis team for advanced system trade study for DARPA project.

### TECHNICAL SERVICES ASSOCIATE

#### EPIC SYSTEMS CORPORATION • 9/12 - 1/16

TASKS / ACCOMPLISHMENTS:

- Enabled Healthcare customers to securely exchange information with over two hundred organizations.
- Leveraged creativity and problem-solving skills to troubleshoot complex systems in a fast-paced environment.
- Consistently recognized by customer feedback as having a unique ability to simplify a complex issue to its core components.

### SYSTEMS ENGINEER

#### AEROSPACE TESTING ALLIANCE • 5/08 – 9/09

TASKS / ACCOMPLISHMENTS:

- Directed maintenance and reliability of multi-milliondollar compressors for a jet engine test facility.
- Coordinated a 12-week preventative maintenance project scheduling and organizing electricians, mechanics, engineers and vendors within a strict deadline.
- Spearheaded an analysis of potential failure modes and their effects on three testing facilities to prevent costly repairs.

# STRENGTHS

**Modeling and Simulation • Design Communication • Time Management** Leadership • Teamwork • Collaboration **Creative • Self-Motivated • Passion Problem Solving • Work Independently** 

## **EDUCATION**

### **M.S. IN AERONAUTICS AND ASTRONAUTICS**

# UNIVERSITY OF WASHINGTON

Seattle, WA

- Developed new plasma CFD mathematical model and created Finite Volume simulation for Thesis.
- Teaching Assistant in Statics, Propulsion and Spacecraft Propulsion classes

### **B.S. IN MECHANICAL ENGINEERING**

#### **TENNESSEE TECHNOLOGICAL UNIVERSITY** Cookeville, TN

Engineering Technician (Co-op)

Aerospace Testing Alliance 1/06 – 12/06

# **TECHNICAL SKILLS**

#### **COMPUTER-AIDED DESIGN**

SolidWorks, AutoDesk, Finite Element Analysis (FEA), Computational Fluid Dynamics (CFD) Analysis

#### COMPUTING

Python, C++, MATLAB, Word, Excel

#### **RAPID PROTOTYPING**

3D-Printing, CNC Milling, Casting, Hardware/Mechatronics. Software

#### **RESEARCH & DEVELOPMENT**

Mathematics, Physics, Scientific Computing, Statistical Analysis, Validation Testing, **Design Review** 

#### **PROJECT MANAGEMENT**

Systems Engineering, Project Planning, Policies and Procedures, Reporting, Presentations