Samuel Kleespies

1915 2nd Ave, Seattle, WA 98101 | (813) 361-1755 | sam.kleespies@gmail.com
samkleespies.com

Education

UNIVERSITY OF CENTRAL FLORIDA
Degree: Mechanical Engineering
Minors: Computer Science, Cinema Studies
Aug 2015 - Dec 2019

RELEVANT COURSEWORK
- Computer Science I/II
- Object-Oriented Programming
- Discrete Structures
- Computer Logic and Organization
- ACloudGuru AWS Solutions Architect Associate course

Experience

Internships

- Manufacturing Engineer Intern - Kenworth Truck Company *May 2019 - Aug 2019*
  - Lead a wooden assembly fixtures project that allowed production to begin ahead of schedule by 3 months.
  - Presented a labor analysis project, cutting down factory labor times by 30% and increasing production output.
  - Checked, validated, and routed tooling authorizations for tooling purchases upwards of $1,000,000.
- Design Engineer Intern - Kenworth Truck Company *June 2018 - Aug 2018*
  - Optimized a workflow bottleneck by automating SQL data retrieval using VBA, saving teams 20 min/request.
  - Used SQL to perform queries and produce analytics to gain valuable insight into common warranty issues.
  - Designed, validated, and manufactured a new part that solved a problem for a high-frequency failing part.

Research

- Mechanics of Materials Research Group *May 2017 - Dec 2019*
  - Used MATLAB to visualize and automate the calculation of material properties given stress/strain test data.
  - 3D CAD Design and 2D drawing creation of material test coupons.
  - Use of FORTRAN programming to add new features to ANSYS software to meet group project requirements.

Top Projects

- Senior Design Project - Earth-Based Gravity Machine
  - Working in a team of 7 students, designed and built a "drop vehicle" to provide cost-effective microgravity research to be used in educational instruction and graduate/undergraduate research activities.
- Truck Assembly Fixtures project
  - Designed, verified, and built proof of concept assembly fixtures under a tight two-week deadline. Programmed an algorithm to optimize the woodcuts, cutting costs by 15% and project timeline by 2 days.
- Academic/Personal projects
  - Website project: Built my personal website from the ground up with HTML and CSS, utilizing Flask with Python to create a development server, and JavaScript using the jQuery library for advanced features.
  - MIPS architecture implementation in C, probabilistic skip list Java implementation, Arduino C++ flight path programming for Senior Design Project, 2D platformer Unity project,

Skills

Programming

- Languages: Java, Python, C, C++. JavaScript, HTML, CSS, XML, MATLAB, SQL, VBA.
- Tech: AWS EC2, E3, Route 53, Node.js, REST, Bootstrap, .NET, Angular.js, Django, jQuery, React.js, Unity.

Software/Tools

- Expert in Microsoft Excel, Word, PowerPoint, Visio, and Access.

Involvement/Service

- Academic chair of the Rho Gamma chapter of Theta Tau - a Professional Engineering Fraternity.
- Relay for Life UCF, Feeding Children Everywhere food packer, United Against Poverty.
- Intramural hockey, basketball, tennis, dodgeball, volleyball and football at UCF.
- Active club member of ASME, AIAA, SHPE, SEDS, and Theta Tau.