Marius Peter

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Education

2014–2019 **B.S. in Aerospace Engineering**

- Technical breadth in Technology & Management
- Electives: biomechanics, RFID and its application in manufacturing & supply chain
- PID Controller Design Fluid Mechanics Thermodynamics Aircraft Propulsion Thermodynamics

Work

Nov. 2019–Pres. **Systems Test Engineer**

- Built a 1:1 scale test rig for a complete water & waste system
- Created the initial proposal for a novel water system for a supersonic business jet
- Supported the Predictive Maintenance program for highly stressed rotary equipment (vacuum generators, air compressors...)

Sep.–Dec. 2017 **Assistant Business Analyst**

- Created & presented a proof of concept for Airbus' *digital continuity* strategy using principles of Model-Based Systems Engineering
- Secured initial funding from Airbus for a bespoke software solution for *Shop Floor Control Final Assembly Line*

June–July 2015 **Assistant Electronics Engineer**

- Learned HDL, LabVIEW and core concepts of hardware programming and DAQ
- Upgraded FPGA data acquisition systems from CLIs to GUIs (embedded ARM Linux)

Projects

Apr.–June 2019 **Design-Build-Launch**

- Competition: design, manufacturing, testing & flight analysis of a model rocket
- Lead the manufacturing of our rocket: mill & lathe, 3D printing, fiberglass, plywood...
- First place for all criteria: maximum apogee, intact payload, trajectory prediction...

Apr. 2019–Pres. Aircraft Studio Python www.github.com/Blendoit/Aircraft_Studio

- Broadened the scope of a program written for UCLA's aircraft design course
- Initial goal: design FAR 23 compliant NACA airfoils and optimize for weight using a Monte Carlo simulation, then a genetic algorithm
- Ultimate goal: develop an aircraft creation suite designed for non-technical persons

2012–Pres. **3D Design/CAD Solidworks/Blender**

- 7 years experience in geometry modeling, texturing, rendering visual FX

Skills

Computer Science

- Microsoft Suite & LaTeX
- Verilog, MATLAB, Python, Lisp
- SOLIDWORKS, Blender 3D

Systems & Industrial

- UML, SysML, BPMN
- AnyLogic, SIMPROCESS
- NI LabVIEW, other DAQ

Languages

- Native: French, English
- Proficient: German
- Intermediate: Chinese