JOIN AIRBUS’ UNIQUE INTERNATIONAL INTERNSHIP PROGRAMME!

- Join exciting innovative projects
- Solve real aerospace challenges
- Join an international team of interns
- Learn from world-class experts
- Special development opportunities
As a member of the Airbus Global University Partner Programme (AGUPP) your university has a unique relationship with Airbus. As a student of one of our partner universities, we wish to offer you the opportunity to join our paid International Internship Programme as an intern in our limited “Team-Oriented Projects”.

40 positions have been selected for this exciting programme reserved for some of the most driven, innovative and talented students from our partner universities. They present a great learning and development opportunity within one of the most innovative aerospace companies in the world.

To respect the international nature of this programme, we advise you not to apply for an internship in your home country.

Please ensure you mention your UNIVERSITY and DEPARTMENT when completing the first page of the application form under the field: Name of Educational Establishment.
USA
Georgia Institute of Technology
The University of Alabama
New partner university in progress

UK
Cranfield University
Imperial College London
The University of Manchester
University of Bristol

Spain
Universidad Carlos III de Madrid
Universidad Politécnica de Madrid
Universidad de Sevilla

France
École Centrale de Nantes
Institut Mines-Télécom
ISAE SUPAERO Toulouse
New partner university in progress

Italy
Politecnico di Milano

Germany
HAW Hamburg
Hamburg University of Technology
TU Munich

Netherlands
Delft University of Technology

Sweden
KTH Stockholm
New partner university in progress

Japan
New partner university in progress

Singapore
National University of Singapore

Australia
New partner university in progress

India
Indian Institute of Science Bangalore

Legend

Partner University
CF3D - Carbon Fiber 3D Printer

Project based in Madrid Spain

From May onwards (flexible start date) for minimum 3 months length

3 positions available

JOB DESCRIPTION

The goal of the project is to develop a carbon fiber 3D printer in the AIRBUS Getafe ProtoSpace.

This project is part of a wider one in collaboration with FIDAMC (research center in composites materials that belongs to Airbus as a foundation). The aim of this study is to research the additive layer manufacturing using carbon fiber as input material and a first prototype of a 3D printer has been manufactured in FIDAMC facilities already.

The team of interns will develop a 3D printer based on the existing one but taking into account the lessons learned and future improvements recommendations. Final challenge for AIRBUS will be to print a real aircraft part and test it.

TASKS & ACCOUNTABILITIES

- Extract several lessons learnt from the first 3D Printer prototype made.
- Assemble Hardware and material provided by AIRBUS ProtoSpace to build the Carbon Fiber 3D Printer.
- Program and test the device to optimize results and make changes accordingly.

REQUIRED SKILLS

Different and complementary profiles are desirable so they could learn from each other and work together from different perspectives but under the same objective.

Bachelor or Master degree students from Mechanical Engineering, Electronics (ARDUINOS) y Composite Material fields.

- Very good communication and negotiation skills.
- Dynamic, autonomous and ability to work as a team.
- English fluent.
AIR – AIRBUS Artificial Intelligence Resources Center

📍 Project based in Toulouse France
💸 From May onwards (flexible start date) for minimum 3 months length
👨‍💻 5 positions available

JOB DESCRIPTION
The goal of the project is to setup a place able to speed up Artificial Intelligence (AI) dissemination within AIRBUS and where all required resources and support are available to make AIRBUS a leading company in this domain. This goes through the centralization and capitalization of:

• datasets (audio, video, flight records) to train and benchmark AI systems.
• AI software libraries and frameworks to setup and develop quickly proofs of concepts and applications.
• computing and hardware devices to implement solutions.

This place would be supported by a team of AI skilled people to elaborate fast and adequate solutions to any employees’ ideas.

TASKS & ACCOUNTABILITIES
The goal of the international internship project is to participate to the development of AIR.

• Benchmarking AI initiatives outside and inside Airbus with partners, universities, start-ups and identify priorities of areas to explore.
• Energize the Airbus ecosystem by the organization of an IdeaSpace campaign, and create a community to communicate around AI.
• Kick-off prototyping related to identified use cases during the campaign.
• Identify missing resources (dataset, SW,….) within Airbus needed for this technology. Propose a way forward, a physical and organizational architecture to boost AI usage for Airbus application.

REQUIRED SKILLS
Bachelor or Master degree students from Artificial Intelligence, Data Management, Engineering, Computer Science, Robotics fields.

• General knowledge of Aerospace is a plus but not fully mandatory.
• Very good communication and negotiation skills, global thinking, achiever and pragmatic mindset, dynamic & autonomous.
• English fluent.
Aircraft Health Monitoring in Scheduled Maintenance

📍 Project based in Hamburg Germany and Toulouse France
📍 From May onwards (flexible start date) for 12 weeks length
📍 5 positions available, 3 based in Toulouse and 2 based in Hamburg

JOB DESCRIPTION
The development of Aircraft Health Monitoring technologies is considered as a major opportunity to improve existing aircraft scheduled maintenance programs in the near future, by providing alternative means of compliance. Associated with Airbus in-service data collection latest improvement, it allows development of new maintenance solutions to maximise Aircraft availabilities.

TASKS & ACCOUNTABILITIES
- Identify candidate Systems that could benefit from Health Monitoring technologies to improve existing maintenance programme.
- Determine what are the necessary in service data to collect and ensure their availability within Airbus data collection systems.
- Inventory the reporting operators and the means they use to report scheduled maintenance data.
- Analyse according to the Maintenance Information System used by operators the technical improvements that can be envisaged to ease and automatize the data reporting.
- Prepare communication to operators in order to propose them the identified way of improvements.
- Develop algorithms that ensure alternative means of compliance to existing schedule maintenance programme.
- Benchmark Maintenance costs & Aircraft availability versus existing Scheduled maintenance programme.

REQUIRED SKILLS
The project necessitates a collaborative behaviour from the students with different profiles.
- Bachelor or Master degree students from Aerospace, Aircraft systems, Data Science, Computer Science fields.
- English fluent.
Future Engineering OpenLab

- Project based in Toulouse France
- From May onwards (flexible start date) for 6 months length
- 5 positions available

JOB DESCRIPTION
Going from idea to virtual product and finally to real product takes a very long time, costly, is hard to visualize and understand interdependencies in design of complex systems and access to crowd-source type expertise is limited due to complex/tribal and disconnected types of design environments. Today in the gaming world we begin to see a trend and opportunity for applying new thinking and technology to make a disruptive step in the engineering design space. This project aims to create an Engineering environment where “Ideas” are directly created as “digital products”; opening up the ideation space to a much broader population.

TASKS & ACCOUNTABILITIES
• Product conception through “Serious Gaming and/or Game with a Purpose GWAP” where Engineers are directly assembling components coming from “Enterprise/gamified Model Repository” and/or GWAP techniques to optimize solutions (Examples: Nanocrafter, Foldit, Scrap Mechanic, Minecraft, Eve Online).
• Enable a new and more interactive design environment “User experience” through an immersive environment 4D or plus (AR/VR, Hologram, 3D print).
• Idea materialized as “Digital Product” is the starting point for “Digital Twin” and could be reused as a prototype.
• Create an “OpenLab” where students, start-ups and maybe any other people can “propose”, “Test”, “collaborate” and “share” new ideas as “digital drafts” and or “modules” like building blocks (including different games for different levels of problem) + a tiered platform approach for integrating multiple/different games and or scenarios into a final product construct.

REQUIRED SKILLS
Bachelor or Master degree students with fluent English, in total we are looking for 5 different profiles:
• User Experience Designer (Low fidelity mockup tools such as Balsamiq, UXPin, Mockingbird,Gliffy).
• Serious games (Unity 3D, Unreal Engine, Gpure, Blender).
• AR/VR expert (tools: Unity 3D, Unreal Engine, Gpure, Blender).
• System Engineer (SysML, system architecture tools: Cameo or Rhapsody, engineering tools: Matlab Simulink, 3DExperience, Modelica, Amesim).
• Software Developer (Python, Java, Javascript, C, C++).
Airbus Holographic Academy

- Project based in Toulouse France
- From May onwards (flexible start date) for 12 weeks length
- 3 positions available

JOB DESCRIPTION
The project is to integrate the Airbus Holographic Academy to research and develop AR/VR technologies that could disrupt current business applications. It aims also to raise awareness of business owners by introducing the technology and researching on the field new business application (UX). Finally, AIRBUS is expecting to build interfaces that makes the technology transparent to the user, according to the most appropriate technology selected for the application.

TASKS & ACCOUNTABILITIES
- To analyse and guide business owners to the most appropriate technology according to their needs.
- Master cutting edge technologies and build good-enough application to make them commonalities.
- To research and understand very rare technologies and project their impact to build the future of the company.

REQUIRED SKILLS
Bachelor or Master degree students with fluent English, in total we are looking for 3 different profiles:
- 3D developer (3D Unity).
- Technical artist (link between 3D developer and UX Designer, technical knowledge in ·3D Unity and 3Ds Max will be valued).
- UX designer (3Ds Max – Blender).
Positive and constructive person, who listen other people and can explicit complex ideas with simple wording and schematics.
**Tool To Visualize Primary Flight Control System Parameters**

- Project based in **Toulouse France**
- From May onwards (flexible start date) for 6 months length
- **2 positions available**

**JOB DESCRIPTION**
In the frame of e-rudder development, the objective of the internship would be to develop a tool enabling to visualize on Aircraft (in Final Assembly Line or in-Flight Line) all the parameters associated to the status of the ATA27 Primary Flight Control System. In a context of industrial ramp-up of the Single Aisle production this project is a key enabler to improve the performance of our industrial capacity.

**TASKS & ACCOUNTABILITIES**
- Collection of needs, requirements specification.
- Architecture definition (Hardware and Software).
- PC laptop tool development:
  - Collection of parameters / Processing of ARINC frames emitted by system.
  - Visualization tool of these parameters.
  - Possibilities to test some function through this tool to be assessed (servoloop of one ServoControl).
- Use inputs from similar tools developed on A380 & A350 to support the study.

**REQUIRED SKILLS**
- Bachelor or Master degree students with fluent English.
- Input processing, electronics, Real-Time.
- Software development (C,C++, Python...).
- HW/SW architecture.
Airline Sciences team is a melting pot of newcomers and senior experts from all around the world, organized in Agile way and strongly dedicated to the establishment of new standards in aircraft evaluation. Airline Sciences is about combining tool kits from Marketing, Design and Airlines Operations Support Services to:

Ensure the delivery of reliable aircraft economics, to design the right aircraft for our customers to maximize Airbus’ profitability, and finally to provide the ability to play out airline scenarios to explore new markets and/or yields.

**TASKS & ACCOUNTABILITIES**

- Ensuring a continuum in aircraft representation, adjusted through operations feedbacks enabling airline tactical gains.
- Designing aircraft and engine using actual airline operations.
- Combining market forecasts and airline simulations.
- More generally speaking, Fuel Policy, consumption, traffic, revenue, maintenance... are as much parameters considered by Airline Sciences team.

**REQUARED SKILLS**

Bachelor or Master degree students with fluent English, in total we are looking for 5 different profiles:

- Maintenance/Cost.
- Revenue/Network optimization.
- Traffic/Airport/ATC.
- Flight Performance/Fuel Policy.
- Engine Performance/modeling.

Following knowledge or expertise will be valued: Applied mathematics, Aerospace Engineering, Object oriented programming (Java, C++, Python), Data Science toolkit (numpy, scikit learn pandas, tensorflow).
HR4HR Developing Learning Solution

- Project based in Toulouse France and Hamburg Germany
- From May onwards (flexible start date) for 5 months length
- 3 positions available, 2 based in Toulouse and 1 based in Hamburg

JOB DESCRIPTION

HR4HR, a transnational & cross-divisional team spread across 8 sites acting as Human Business Partner for HR and developing learning solutions for HR. The mission of the interns’ team will be to develop HR one step forward with a new portfolio in the catalogue of alternative learning solutions.

- Analysis of the current portfolio between e-learning, classroom trainings and alternative learning solutions and the H competences addressed, gap analysis versus the H competence strategy, competence analysis of the H population.
- Proposal of alternative learning solutions that can answer competences not addresses through current offer and not yet largely developed.
- Design of alternative innovative learning solution not yet addressed in the portfolio (e.g. learning expedition or videogame).
- Conduction of pilot to test the solution proposed.

TASKS & ACCOUNTABILITIES

- Work as a transnational team in different locations.
- Conduction of a project from A-Z, starting by analysis and ending by implementation.
- Evolve and look for information in a complex environment (CKL J).

REQUIRED SKILLS

- Ability to work in a team.
- Fluent level of English required.
- International experience will be valued.
- Student from Engineering or Business and Administration fields.
Collective team goals and collective Reward

📍 Project based in Toulouse, France
📍 From May onwards (flexible start date) for 6 months length
📍 3 positions available

JOB DESCRIPTION
Out of several feedbacks from the business we recognize a rising interest to connect collective goals with collective reward. There are some pitfalls with respect to mind-set / culture, national / legal binding rules, implementation within a changing environment.

• The aim of the mission is to design, test and implement new idea how to foster team goals and especially how to link those team goals towards collective reward using a test environment (POC).
• The team will have to setup a project management plan, KPI's and start the design by getting the most relevant stakeholders view on board.
• Design the process and if necessary the means (tooling) to support collective goals and reward. The main deliverable will be the proof of concept - implementation in a smaller environment.

TASKS & ACCOUNTABILITIES
• Work as a transnational team in different locations.
• Conduction of a project from A-Z, starting by analysis and ending by implementation.
• Evolve and look for information in a complex environment.

REQUIRED SKILLS
Bachelor or Master degree students with fluent English (French would be valued).
To get the most out of it and to embark diverse cultural and technical skill (IT, HR, business, legal) we aim at an international team of students from diverse areas not necessarily HR only. The team should have a strong focus on delivery and implementation.

• IT/Data driven.
• Knowledge of Project management.
• General Business skills.