

Silicon Mobility

Internship Description

Java porting of an existing bitstream generation
tool
(SM-STC003 / 2021)

Internship Description

Company	<p>SILICON MOBILITY SAS (numbered 815 085 659 000 28 RCS Grasse) <u>Head office</u> : Les Aqueducs – Bât 2 – 535, route des Lucioles – 06560 Valbonne Sophia-Antipolis</p> <p>The Automotive industry is living a revolution. Electrification, autonomous driving, diverse mobility, connectivity are trends that are drastically changing the industry’s rules. Among all decisive topics revolutionizing cars in the next future, Silicon Mobility is committed to support the rapid advent of electric and hybrid cars.</p> <p>Silicon Mobility is a technology leader for cleaner, safer and smarter mobility. The company designs, develops and sells flexible, real-time, safe and open semiconductor solutions for the automotive industry used to increase energy efficiency and reduce pollutant emissions while keeping passengers safe.</p> <p>We are looking for a good candidate to join our R&D team working in Sophia-Antipolis on the French Riviera. Please contact us: internship2021@silicon-mobility.com</p>
Offer Number	SM-STC003-2021
Project Title	Java porting of an existing bitstream generation tool
Period	5-6 months– between February/March/April and September 2021
Working hours	35 hours a week at Silicon Mobility office
Income	1000€/month + Tickets Restaurant
Student level	Last year of Masters (BAC+5 or equivalent)
Project Description	<p>Silicon Mobility has developed a toolchain to implement complex functions in a programmable area (called FLU - Flexible Logic Unit) of OLEA® FPCUs. This toolchain includes software that allows the generation of the FLU bitstream from Place&Route results.</p> <p>The objective of the project is to port and restructure existing software developed in Perl using the JAVA language.</p> <p>Particular care should be provided on the structuring of Java objects to allow the modularity and flexibility needed for future software evolutions.</p> <p>This project will be divided in 3 main phases:</p> <ol style="list-style-type: none"> 1. <u>Exploration</u>, the trainee will have to acquire knowledge of: <ol style="list-style-type: none"> a. OLEA® FPCU programmable logic area b. Current bitstream generator (called Agilis) 2. <u>Specification</u>, the trainee within the AMEC/Tools team will: <ol style="list-style-type: none"> a. Specify the needs b. Define the major steps of the development c. Define the software architecture 3. <u>Development</u>, in this phase the trainee will: <ol style="list-style-type: none"> a. Develop b. Check c. Write the user guide
Profile	<p>For this training, we are looking for a candidate with:</p> <ul style="list-style-type: none"> • good knowledge of embedded systems and application software development • good English level • autonomy, rigor, strong team spirit, strong problem-solving skills • knowledge of Hardware design for embedded system (would be appreciated)
Skills developed	<ul style="list-style-type: none"> • Application software development • JAVA language • General knowledge in microcontroller development • Quality approach

