

Subject: Internship Project Proposal

<i>Code Name</i>	PTA_EN_2026-UNMECLE-0008564_26/02/2026 9.33.23
<i>Date</i>	26/02/2026 9.33.23
<i>Target</i>	Master's Degree - Data Science

Host Institution

<i>Host Institution</i>	STMicroelectronics srl
<i>Protocol</i>	2026-UNMECLE-0008564
<i>Protocol Date</i>	22/01/2026
<i>Country</i>	Italy
<i>City</i>	Agrate Brianza
<i>Address</i>	via Camillo Olivetti 2, 20864
<i>Website</i>	www.st.com
<i>Employees Number</i>	12634
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<i>Email</i>	letizia.pavone@st.com

Project Supervisor

<i>Name and Surname</i>	Patrizia Bellitto
<i>Phone Number</i>	+39 3667628193
<i>Email</i>	patrizia.bellitto@st.com

Internship Project Details

<i>Title</i>	Op-amp photo diode simulator inside eDesignSuite
<p><i>Detailed Description:</i> The project will focus on the design and development of a new web application within the Signal Conditioning Design Tools section of eDesignSuite (https://eds.st.com)</p> <ul style="list-style-type: none"> -The student will be involved in: -Front-end development (React.js) -Implementation of the user interface using React.js, following component-based design principles -Development of responsive pages and components (input forms, configuration panels, result views, tables, charts, etc.) -State management and interaction with back-end APIs (data fetching, error handling, loading states) -Contribution to the UX of the tool: layout, navigation, validation messages, user feedback on errors and computation progress -Possible integration of data visualization libraries (e.g. charts) to display design results -Back-end development (AWS Lambda) -Design and implementation of serverless back-end functions using AWS Lambda -Definition of REST APIs to support the new design workflow -Integration with existing eDesignSuite services and data models -Implementation of business logic and calculation flows related to signal conditioning design -Basic monitoring and debugging of Lambda functions (logging, error handling) -Design, integration & collaboration -Understanding of the current eDesignSuite architecture -Collaboration with the SW design team to refine requirements, user flows and data 	



structures -Participation in design iterations based on internal feedback and testing -Use of Git and standard software development workflows (branches, pull requests, code reviews, issue tracking)	
<i>Topics</i>	Deploy in DEV environment (dev-eds.st.com) a first full-working version of the tool
<i>Reimbursement of Expenses (YES/NO)</i>	YES
<i>Refund Amount</i>	€1.000
<i>Availability for Travel (YES/NO)</i>	NO
<i>Kind of employment</i>	Full time
<i>Duration in months (max 12)</i>	1
<i>Duration in hours</i>	150
<i>Internship Date Start</i>	13/03/2026
<i>Internship Date End</i>	08/04/2026
<i>Number of Open Position(s)</i>	1

Internship Skills

<i>Required Skills:</i>	
<i>Other Skills</i>	



Università
degli Studi di
Messina

University of Messina, Italy
Department of Mathematical and Computer Sciences,
Physical Sciences and Earth Sciences