



Company-paid R&D Internship in Denmark

Partners	Intel Denmark
City	Aalborg, Denmark: a student-friendly town with a large international student community (http://www.visitaalborg.com/).
Grant	1500€ per month provided by Intel.
Duration & start	Nine to twelve months, starting date 1 st September 2015.
Title	GPU-accelerated simulator for 5G millimeter communications
Description	<p>Over the last decade, the demand for mobile data has been steadily growing. In response, the industry engaged in two different types of research efforts. At first, the attention was focused on increasing the spectral efficiency of the fourth generation of mobile radio access technologies. This has led to the creation of LTE-Advanced and its direct successors. More recently, the focus has been shifting towards millimeter communications, which is one of the aspects defining the fifth generation (5G) of mobile radio access technologies.</p> <p>As one of the largest suppliers to the wireless value chain, Intel is at the forefront of millimeter communication research. Within the scope of the internship, you will support a team of engineers and researchers in creating a detailed simulator for millimeter communications and 5G radio access technologies. Specifically, you will join our team in accelerating receiver algorithms using OpenCL and/or GPU-specific libraries.</p>
Required skills	<p>Familiarity with the following topics is required:</p> <ul style="list-style-type: none">• Programming in MATLAB• Programming in C/C++• Written and oral English
Preferred skills	<p>Exposure or experience with any of the following topics is preferred:</p> <ul style="list-style-type: none">• Programming in OpenCL• Programming with NVIDIA CUDA libraries• Digital communications• Team work
Application	<p>If preferred, the internship can be offered in conjunction with a graduation project. Please send CV and motivation letter to the following contact:</p>

Dr.-Ing. Tommaso Balercia

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