



# Research Scientist Embedded Software and System Simulation for Solid State Lighting

Job ID: 71574  
City, Country: Eindhoven, Netherlands

## Organization:

Philips Research is the source of many advanced developments in Healthcare, Lifestyle and Technology. Building on 90 years' experience in industrial research and our world-leading patent position, we're dedicated to meaningful innovations. In the healthcare domain, we are enhancing imaging and monitoring systems, as well as exploring innovative personal healthcare. In lifestyle, we're helping people see, hear, remember and share content, anywhere and anytime. Our vision focuses on simplicity, making technology an integral – but invisible – part of everyday life.

## Department Description:

Philips is the world leader in Lighting. The department Solid State Lighting (SSL) addresses primarily technologies for LED-lighting systems. It is also the home of the capability cluster of energy conversion technologies of Philips Research. We carry out fundamental and applied research on system concepts and power conversion modules for a wide range of applications. Our focus is on solid state lighting and medical high-power converters, and we are working on renewable energies and building power systems as well.

## Your Responsibilities:

As a research scientist you create innovative and new SSL systems (products) that unleash the full potential of Solid State Lighting both in already existing, but more and more also in completely new applications. Supported by your colleagues as well as your internal customers from product development and pre-development, you will contribute to the challenging task of designing advanced solid state lighting systems enabling convenient user interaction and seamless integration into higher level control systems.

You will acquire and maintain a thorough understanding of the requirements of world class SSL systems, both from an application and a technology point of view, and how to translate these into system architectures that fit in the SSL ecosystem at an affordable cost level.

In your frequent contacts with the SSL predevelopment organization you will constantly strive for a system architecture that can support a wide range of applications and at the same time is sufficiently modularized to cope with different levels of system complexity. Visiting trade shows or attending leading SSL conferences will be part of your work.

## Your Profile:

- Solid background in electronics, covering at least two of the following fields:
  - Embedded software for  $\mu\text{C}$ , DSP and/or programmable logic (CPLD / FPGA)
  - System simulation (using e.g. Matlab/Simulink)
  - Digital electronics
  - Low cost communication interfaces
- Hands-on practical experience in realizing circuits and/or embedded software
- Experience in circuit simulation (e.g. Pspice or LTSpice)
- Highly welcome are skills in
  - Wired and wireless interfaces used in the lighting domain, e.g. DMX, Dali, ZigBee
  - Analog electronics and sensors (practical experience and simulation)
  - Basic understanding of power electronics
- Motivation to work inter-disciplinary and application-oriented
- High communication skills, good team-player in a customer-focused project team

Information: [www.philips.com/careers](http://www.philips.com/careers)

HR: [anje.schoonbaert@philips.com](mailto:anje.schoonbaert@philips.com)

SSL: [reinhold.elferich@philips.com](mailto:reinhold.elferich@philips.com)  
(+31 06 21101740)



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