

## **Bachelor thesis topic**

### **Topic: Spider plot widget implementation and evaluation**

Many analysis tasks require analyzing multi-variate datasets. For example, when analyzing the fiber distribution in a fiber-reinforced polymer, material scientists are interested in properties such as size, shape diameter and direction of each fiber.

Spider plots can provide a useful overview of a specific combination of such properties, and are useful for comparing two or more objects regarding their properties. The task here is to implement spider plots [in C++ using the Qt framework], and applying them to visualize a provided real-world dataset. A short evaluation regarding their usefulness in comparison to other, existing visualization methods, like scatter plot matrices and parallel coordinates, concludes the topic.

### **Starting literature:**

- <http://www.vtk.org>

### **Advisor:**

Bernhard Fröhler (bernhard.froehler@fh-wels.at)