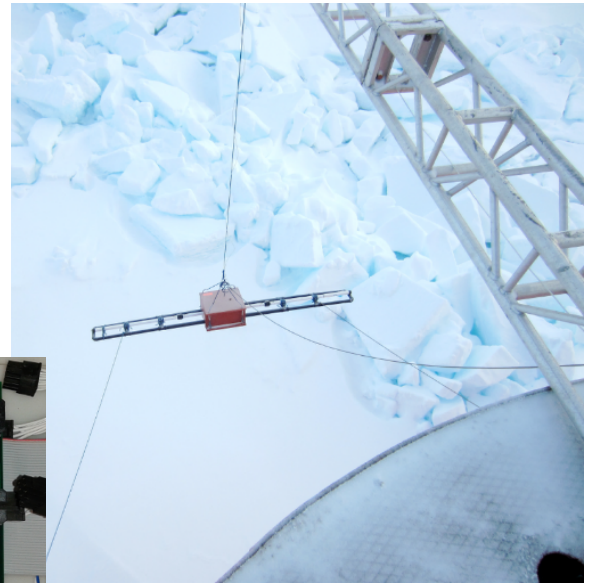
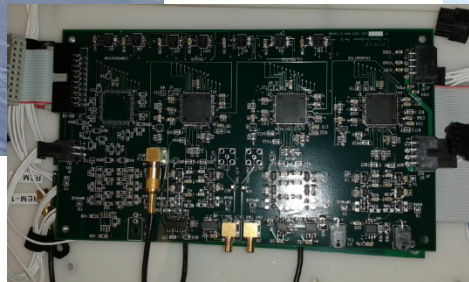
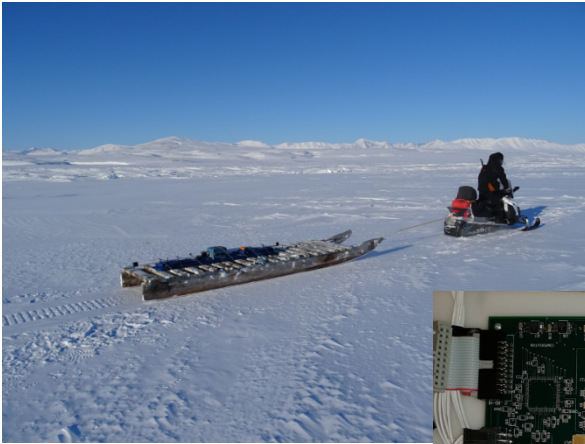


## Student project/job opportunity

### Development of a data acquisition unit for sea ice monitoring systems



The Sea Ice Physics Section at the Alfred Wegener Institute obtains the key observations required to untangle the uncertainties of the rapid changes of Arctic and Antarctic sea ice. We are developing various sea ice thickness monitoring systems that can be used with snowmobiles and ships while moving, or autonomously while placed on the ice for months. The systems consist of various sensors (e.g. EM instrument, sonic rangefinder, GPS, laser distance meters), that have their own interfaces (e.g. serial, analog, USB, Bluetooth) and need to be controlled synchronously by a central data acquisition unit. The systems need to communicate with other computers (e.g. tablet) for control and real-time display of processed and corrected data, e.g. ice thickness along a travel route.

We are looking for capable, independent students that are interested in developing the hardware and software components of such systems and their interfaces. This requires sound knowledge of electronics and software engineering. The projects can be carried out as student job (HiWi) or BSc or MSc projects. For further information please contact:

**Prof. Dr. Christian Haas**

University of Bremen, Inst. for Environmental Physics (IUP)  
Alfred Wegener Institute for Polar and Marine Research (AWI)  
Klusmannstrasse 3d  
27570 Bremerhaven, Germany  
Tel: 0471 4831 2285  
Email: [chaas@awi.de](mailto:chaas@awi.de)

I will be away from Nov 15, 2019, to March 10, 2020, please contact Jan Rohde [jan.rohde@awi.de](mailto:jan.rohde@awi.de) instead during that time.

**OR:**

**Prof. Dr. Anna Förster**

Sustainable Communication Networks  
Faculty of Physics and Electrical Engineering  
University of Bremen  
NW1, Otto-Hahn-Allee 1  
28359 Bremen, Germany  
Tel. 0421 218 62383

Email: [projects@comnets.uni-bremen.de](mailto:projects@comnets.uni-bremen.de)

