Announcement of NTNU-CSC PhD Scholarship

**Type of scholarship:** Degree seeking PhD

**Period of the scholarship:** August 2022 – July 2025

**Short description of the scholarship:**
The scholarship will be used for a 3-year PhD position at the Department of Mechanical Engineering, NTNU.
The research topic will be ‘Development of modeling and assessment methods for resilience enablers in a complex system’. Resilience enabler is a fully new concept to describe the add-on elements that are deployed in a system to mitigate system degradation, alleviate disastrous consequences and facilitate system recovery from collapse. Although many models and analysis approaches have been developed for resilience engineering, no dedicated attention is paid to resilience enablers. Questions are thus raised on how the effects of such elements can be modeled, how their performance can be analyzed and how their criticalty to a system can be evaluated. The PhD project will explore some reasonable answers to the above questions and build a solid foundation for further researches.
The PhD project is not only for theoreitical study, but can be adapted to industrial applications according to background and interest of the candidate. Potential applications can be energy supply chains and green hydrogen production. The PhD candidate will then collaborate with other researchers in the specific applications.
In addition to the scholarship provided by CSC, payment to the candidate of this PhD can be from being employed as a project assistant.

**Qualification and requirement:**
- Master degree in the fields of management science and engineering, operational research, systems engineering, industrial engineering, reliability engineering and safety engineering
- Motivation for fundamental scientific research of practical relevance
In addition, for all applicants the following applies:
- Fluent English language, both written and spoken with certificates of TOEFL minimum 95 or IELTS minimum 6.5
- Chinese citizenship documents (copy of his/her passport or national ID of P.R. China
- CV
- A motivation letter

**Deadline for submission of application:** no late then the 15th Jan 2022
Scholarship: Around 22,000 NOK/month for a period of up to 36 months (degree seeking PhD)

According to the NTNU-CSC agreement
CSC will provide a living stipend, currently 12,500 NOK per month for a period of up to forty-eight (48) months, and a round-trip international airfare between China and Norway. NTNU will provide a monthly additional funding for a period of 36 months.

Supervisor info: Yiliu Liu, Associate Professor, Department of Mechanical and Industrial Engineering, Email: yiliu.liu@ntnu.no.

Email and contact information for where to send the application:
yiliu.liu@ntnu.no