

# Charles Rutherford Ildstad

## Curriculum Vitae

Singsakerbakken 2B  
7030 Trondheim  
☎ +47 926 94 138  
✉ [charlesi@stud.ntnu.no](mailto:charlesi@stud.ntnu.no)  
📁 [folk.ntnu.no/charlesi](http://folk.ntnu.no/charlesi)

### Education

- 2013–2018 **Integrated Masters in Geotechnology**, *Norwegian University of Science and Technology(NTNU)*, Trondheim, Norway.
- 2010–2012 **IB Diploma Programme**, *Nesbru Upper Secondary School*, Asker, Norway.

### Experience

#### Vocational

- 2014–present **Research assistant**, *NTNU, Department of physics*, Trondheim, Norway.  
Assisting professors in physics with experimental work on thin films.  
Duties:
- Thin film sample preparation,
  - X-ray diffraction and data analysis on thin films,
  - Testing thin films as waveguides.
- 2014–present **Teaching assistant**, *NTNU*, Trondheim, Norway.  
Holding weekly lectures for small groups, answering student questions and correcting mandatory assignments.  
Subjects:
- TTK4105 Control Systems, "*State space representations, feedback and control*":
    - Spring 2016.
  - TPG4100 Geophysics, "*Seismics, electrical, electromagnetic and other methods*":
    - Spring 2016.
  - TMA4130 Calculus 4N, "*Partial differential equations and numerical solution methods*":
    - Fall 2015.
  - TKT4126 Mechanics, "*Stress, strain and statics*":
    - Spring 2015.
  - TMA4110/4115 Calculus 3, "*Differential equations, linear algebra and its applications*":
    - Spring 2015,
    - Fall 2014.
- 2013–2016 **Security alarm operator**, *Verisure*, Trondheim, Norway.  
Part-time employee as an operator at the monitoring central station.  
Duties:
- Customer care,
  - Alarm monitoring.
- 2015–2015 **Learning assistant**, *NTNU, Department of Geology*, Trondheim, Norway.  
Coordinating groups for introductory geology projects.  
Duties:
- Correcting assignments,
  - Introducing new solution methods to the groups,
  - Evaluating team work.

## Miscellaneous

2012–2013 **Guardsman**, *Norwegian armed forces*, Oslo, Norway.

Member of His Majesty The King's royal guard,  
part of compulsory military service.

Detailed achievements:

- Union representative for the 5th guard company,
- Lance corporal(NATO rank grade OR-2):
  - Promoted December 2012.
- Squad leader.

## Languages

|           |        |        |          |
|-----------|--------|--------|----------|
| English   | native | French | advanced |
| Norwegian | native | Danish | advanced |

## Computer skills

|        |                   |            |                         |
|--------|-------------------|------------|-------------------------|
| Python | advanced, 2 years | SimuLink   | intermediate, 1.5 years |
| Matlab | advanced, 2 years | HTML/CSS   | beginner, 1 year        |
| LaTeX  | advanced, 2 years | Word/Excel | expert, 5+ years        |

## Interests

|            |   |
|------------|---|
| Basketball | Playing basketball for the varsity team |
| Debating   | Engaging in various organized debates   |

## Organizational work

- Nesbru model United Nations, 2009-2012(president 2010-2012)
- Class representative, 2009-2010
- Student-body representative for school environment issues, 2010-2012

## Charitable work

- Tutor in the Vector programme, an NTNU math tutoring initiative directed at middle school students, 2013-2014
- Music teacher for developmentally disabled youth, 2010-2012
- Student Mentor for new upper secondary school students, 2011-2012
- Active member of the Amnesty International group at Nesbru, 2009-2011 (Leader of the group; 2009-2010)

## References

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|--|---|
| ◦ Professor:<br>Dr. Ursula J. Gibson<br>Physics professor, NTNU<br>E-mail: ursula.gibson@ntnu.no<br>Work: +47 735 93 336 | ◦ Employer:<br>Katrine Tangen<br>Team Leader, Verisure Norway<br>E-mail: katrine.tangen@verisure.no<br>Work: +47 922 70 034 |
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