# Eyvind Niklasson

# Student



1 East Loop Road 10044 New York, NY USA +1 (607) 379 1575 eyvind.niklasson@gmail.com W eyvind.me in eyvindniklasson gh eyvindn

#### **Education**

Natural Sciences, Viktor Rydberg Gymnasium, Sweden.

Bachelor of Science, Cornell University, USA.

Computer Science with Physics Minor

Master of Engineering, Cornell Tech, USA.

Computer Science

2010–2013

2013–2017

2017–2018

## **Experience**

## Work/Research

**NLP/Reinforcement Learning Research**, New York, CLIC Lab, **2017-2018** Cornell Tech.

 Worked under Dipendra Misra and Professor Yoav Artzi on a research project in language grounding. My duties involved interfacing the deep reinforcement learning model with various simulators, as well as interfacing our simulated model with models from previous research. Additionally, I performed experiments varying different aspects of the model and architecture.

# Machine Learning Intern, Gothenburg, 2015 Summer, 2016 Summer Sweden, Recorded Future.

- Summer 2016: Worked extensively in Tensorflow implementing machine learning algorithms for sentence classification, based off of newly published articles in this field.
   Final model improved upon the existing accuracy baseline for the method currently in use in the company.
- Summer 2015: Word-level disambiguation, using both supervised and unsupervised machine learning on incoming "firehose" of data. Extensive work in Scala using the Word2Vec framework.

Research Assistant, LEPP, Cornell University, Ithaca, US. 2014–2015
Under Professor James Alexander.
Laboratory for Elementary-Particle Physics Cornell University.

Research assistant at Cornell University working on a project in Astrophysics to search
for dark photons in positron collisions. I designed and tested a particle detector. The
work involves a lot of simulation on computers and I had to get acquainted with a
large simulation framework [Geant4] in a short time

Research intern, NORDITA, Stockholm, Sweden. 2012–2013

Nordic Institute for Theoretical Physics

 Worked on a now published research project in Astrophysics: [Particle energization through time-periodic helical magnetic fields]. I developed a particle simulator in Python, which I later ported to C++ to run on CUDA cards [Pyoden – Google Code]

#### Relevant Coursework

**CS 6700**, Advanced AI - Research project on Direct Feedback Spring 2017 Alignment (available on website).

**CS 6784**, Advanced ML - Research project on Dense PixelCNN **Fall 2016** (available on website).

**CS 6741**, Structured Prediction for NLP - Latest NLP research **Fall 2017** paper discussions twice a week.

#### Miscellaneous

**TA**, CS 4300 - Language and Information.

2016 Spring + Fall

Head TA, NBAY 5400 - Tech For Business.

2017 Fall

#### Penetration Testing.

2011-current

- I do penetration testing work in my free time
  - Vice-President, co-founder and CTF team lead for [Cornell Hacking Club]
  - Acknowledged on the site of my Honors Java course professor (a professor in computer security) for identifying a bug in his Secure Voting System - [Condorcet Internet Voting Service]
  - Listed six times on the Google Hall of Fame for finding and reporting six serious security issues, all in the top three severity levels Google uses to classify bugs.
  - Named one of Google's "top security researchers" for 2015.
  - Listed once on Facebook White-Hat Hall of Fame for finding a serious security issue
  - Identified and disclosed security issue in iOS to Apple
  - Completed, and helped develop/administer, challenges for [Tasteless Challs]

#### Capture-the-flag competitions (CTFs).

2011-current

- Participated with [Cornell Hacking Club] in Google CTF, BlazeCTF and IceCTF, scoring top 5%.
- Participated in several CTFs competitions with a team I led at the time [Tasteless]

Researcher, Research Academy for Young Scientists, Sweden.

2012

Four-week summer research school modelled on MIT RSI

 Wrote a scientific article on my project: [Modeling the Path of a Charged Particle in a Magnetic Mirror] and held a presentation on my work for an open audience at the National Museum of Technology in Stockholm.

Finalist, Largest Swedish student research competition [UUF]). 2013

Cornell Chronicle article about me.

2014

# Languages

English, Swedish, Hungarian: Fluent

French: Basic

# **Programming Languages/Frameworks**

#### Tensorflow:

Extensive work during internship - implemented current machine learning research paper for sentence classification in Tensorflow from scratch.

#### Python, PHP, Perl, C++ / C:

I am an autodidact, but have done extensive projects in each, ranging from websites to particle simulators. Listed in order of decreasing experience.

#### Java, Scala, oCaml, Octave:

I have taken formal classes in each of these, and I am proficient. Listed in order of decreasing experience.