

# Anna Verkhovskaya

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annaverk.com

## EDUCATION

**BACHELOR OF MECHATRONICS ENGINEERING** | University of Waterloo | 2B | 2016 - 2021

## EXPERIENCE

**GOOGLE** | Software Engineering Intern

May 2018 - August 2018

- Was part of the team working on the recently released Smart Display product
- Worked across the entire tech stack to integrate a YouTube feature
- Used Python, C++, and JavaScript

**IMAGINE COMMUNICATIONS** | Hardware Design Intern

September 2017 - December 2017

- Worked as part of a large team on the Selenio™ Network Processor
- Used VHDL on an FPGA that managed video over a 100-Gigabit ethernet connection
- Personally built two major FPGA subsystems, one for re-routing video and one for filtering PTP packets

**UNIVERSITY TECHNOLOGIE DE COMPIEGNE** | Prototype Design Intern

January 2017 - April 2017

- Designed and built a system for 2D tracking of a magnet array using hall sensors
- Created a model in Python to optimize sensor placement
- Achieved accuracy of around 0.1mm with no calibration

**UNIVERSITY OF CALGARY LABORATORY OF QUANTUM INFORMATION** | Assistant

Nov 2014 - April 2016

- Assisted with laboratory equipment, including soldering circuits and assembling lasers
- Built a laser system that could measure sound off of paper at a 5m distance

## PROJECTS (MORE AT ANNAVERK.COM)

**GO WITH THE FLOW** | Best Overall, Best Machine Learning at HackPrinceton 2017

(team): A machine vision project that analysed the flow of moving objects in a video. Demo application monitored intersections to optimize traffic control. Written using the YOLO-9000 object recognition library and Python.

**3DRAW** | Finalist at TreeHacks 2018 (Stanford)

(solo): A project for interactive 3D modelling. Light sensors track a pen through space, and the pen's path is recorded, then turned into a printable model.

**PYCAD** | Personal project, can be seen at <http://pycad.xyz>

(solo): A Python library and UI for basic programmatic CAD. Originally written as a tool for creating a hatched chess set.