

# Gregory Kofman

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## Programming

- Java
- Python
- JavaScript
- C
- C++
- Verilog
- OCaml

## Frameworks & Tech

- Tensorflow
- Keras
- Git
- Mercurial
- Node.js
- jQuery

## Languages

- English
- Russian
- German

## Interests

- Jazz piano
- Theater lighting
- Fishing
- Skiing
- Logic games

## Education

|  |                  |
|--|------------------|
| <b>University of Pennsylvania – School of Engineering &amp; Applied Science</b>  | Philadelphia, PA |
| B.S. Engineering: Computer Science   Minors: Mathematics and Physics   | May 2020         |
| <ul style="list-style-type: none"><li>• Coursework: Statistics &amp; Machine Learning, Data Structures &amp; Algorithms, Computer Organization &amp; Design, Introduction to Computer Systems, Complex Analysis, Advanced Linear Algebra, Scalable &amp; Cloud Computing, Operating Systems, Automata, Computability, and Complexity, Networked Systems, Databases, Internet and Web Systems</li></ul> | 3.40/4.00        |

## Professional Experience

|  |                         |
|--|-------------------------|
| <b>Google</b> , Software Engineering Intern  | May 2019 – August 2019  |
| <ul style="list-style-type: none"><li>• Designed, implemented, tested, and launched a modified distributed system for assigning messages to servers efficiently and at scale within Google's Publisher-Subscriber service</li></ul>  |                         |
| <b>Infosys Ltd. InStep Program, Bengaluru</b> , Deep Learning Intern   | May 2018 – August 2018  |
| <ul style="list-style-type: none"><li>• Developed a new method for determining how neural networks make decisions by analyzing outputs of FaceNet; novel method to be pursued further by Infosys</li><li>• Improved neural network for plant disease detection by modifying layers, tuning parameters, and retraining; packaged analytical model into mobile application</li><li>• Created an intuitive web application for building and exporting neural net models by clicking on visual layers; allows users to export a Python script with Keras implementation of the model; used by Infosys to train employees</li></ul> |                         |
| <b>Balloon-borne Large Aperture Submillimeter Telescope</b> , Researcher   | March 2017 – March 2018 |
| <ul style="list-style-type: none"><li>• Developed thermal conductivity calculator, built hard drive tower in a vacuum vessel, assembled and tested solar panel array, and cycled a cryostat to test helium refrigeration</li></ul>   |                         |

## Select Projects

|   |                               |
|---|-------------------------------|
| <b>Keep.id</b>  | August 2019 – Present         |
| <ul style="list-style-type: none"><li>• Co-founder and lead backend engineer of a non-profit that creates secure identity storage for people experiencing homelessness</li></ul>  |                               |
| <b>mHealth</b>  | February 2018 – December 2018 |
| <ul style="list-style-type: none"><li>• Created an iOS application that guides nursing staff through cardiac arrest procedures, records events in database, and alerts for required actions</li><li>• Used by nursing staff at the University of Pennsylvania Hospital</li></ul>  |                               |
| <b>iCane</b>  | January 2018                  |
| <ul style="list-style-type: none"><li>• Created cane powered by Raspberry Pi that uses ultrasonic sensing to detect and recognize objects to assist visually impaired individuals</li><li>• Developed web application that uses beacons placed in buildings to provide user location information via audio</li><li>• Won third place, organizer's choice, and Globo sponsorship prizes at DragonHacks</li></ul> |                               |

## Involvement

|   |                             |
|---|-----------------------------|
| <b>Information and Database Systems (CIS 550)</b> , Head Project TA               | January 2020 – May 2020     |
| <b>Graduate Web Development (CIS 557)</b> , Teaching Assistant                    | August 2019 – December 2019 |
| <b>Stimulus Children's Theatre</b> , Web Master, Tech Director, Lighting Designer | August 2016 – May 2020      |
| <b>Mechanics Laboratory (PHYS 150)</b> , Teaching Assistant                       | August 2017 – May 2019      |

