

# Juan Elenter

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🌐 juanelenter

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## EDUCATION

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### University of Pennsylvania

Philadelphia, United States

- *School of Engineering and Applied Science.* Ph.D. candidate  
Machine Learning, Optimization, Signal Processing.

*Fall 2021 - present*

- *The Wharton School.* Master of Arts in Statistics.

### Universidad de la República

Montevideo, Uruguay

*Bsc. Electrical Engineering, Signal Processing.*

Dissertation: ML for Genome Enabled Prediction of complex traits in agriculture.

*2016 - 2020*

## EXPERIENCE

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### Research.....

#### Flatiron Institute, Simons Foundation

New York, United States

*Summer intern at the Center for Computational Mathematics*

*Summer 2022*

- Worked on stochastic optimization methods that yield near interpolators with Robert Gower.

#### Stanford

Remote

*Visiting student at KundajeLab*

*Spring 2021*

- Worked on motif discovery through chromatin accessibility prediction under the supervision of Prof. Anshul Kundaje. Designed and trained BPNet neural networks to find cell-type specific motifs that potentially play a role in gene expression and regulation.

#### CERN

Meyrin, Switzerland

*Summer Student at the Compact Muon Solenoid Experiment*

*Summer 2020*

- Interned at the data visualization team of the CMS experiment under the supervision of Dr. Kati Lassila Perini.

### Papers.....

- Neural Networks with quantization constraints.  
**Elenter**, Hounie, Ribeiro. (submitted to ICASSP 2023)
- A Lagrangian Duality Approach to Active Learning.  
**Elenter**, NaderiAlizadeh, Ribeiro. (NeurIPS 2022)

### Industry.....

#### ProteanTecs

Haifa, Israel

*Signal Processing Intern*

*Summer 2019*

- Designed and trained models to predict IDDQ spikes in integrated circuits by using voltage and cycle time measurements at various locations in the chip. Improved accuracy of previous model by 6%.

#### IBM

Montevideo, Uruguay

*Full Stack Developer*

*2018-2019*

- Built IBM Cloud interface to monitor current sensors via the SNMP protocol and Node Red.
- Worked on forest fire detection with long distance security cameras using IBM Watson.

## SKILLS

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- Programming Languages: Python (preferred), C++, Matlab, C, SQL, Pascal
- ML frameworks: PyTorch (preferred), Tensorflow, Sklearn
- Languages: Fluent in *English, Spanish* and *French*.

## OTHER

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- Former player of the Uruguayan Waterpolo National Team
- NASA 2019 Space App **Hackaton**: Global Finalist
- **Teleton Electric Wheelchair**: Designed and built an electric wheelchair for 3 to 5 year old children with reduced leg mobility. Worked both on hardware and control software.
- Exchange student at INSA Lyon, France, in 2018.