# MARCO VIERO, PH.D.

### **Data Scientist and Engineer**

(\*) <u>www.correlatednoise.com</u>

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github.com/marcoviero

## **EXPERIENCE**

#### **R&D** Data Scientist

#### **Wahoo Fitness**

04/2018 - Ongoing

Atlanta, GA

- Leveraged existing sensor data to replace hardware, saving ~5k/day.
- Implemented FIR, IIR, and Kalman filters to improve ride position data.
- Used 3D accelerometer data and machine learning techniques to classify swim strokes.

#### Kavli Fellow in Astrophysics

#### **Stanford University**

08/2014 - 04/2018

Palo Alto, CA

- Recognized leader in the nascent field of Line-Intensity Mapping
- Lead modeling efforts, employing Bayesian parameter estimation on big-data sets.

#### Postdoctoral Scholar

#### **California Institute of Technology**

07/2010 - 08/2014

- Pasadena, CA
- Pioneered multi-disciplinary approach employing statistical techniques (cross-power spectra, covariances) on noisy data.
- Released code (Github); is now standard software in the field.

#### Head Engineer

#### **Parlee Cycles**

2003 - 2005

- Peabody, MA
- Mechanical design of the Z1/2/3 stock carbon fiber racing frame, significantly reducing fabrication costs.
- Responsible for all design decisions, including geometries, layer orientation, molds, and fabrication process.

# **QUALIFICATIONS**

- Developed, validated, and publicly released sophisticated modeling software.
- Designed high-order statistical algorithms to measure signals in large data-sets.
- Lead multi-institution signal-forecast modeling team.
- Effective communicator:
  - 80+ publications,
  - 50+ talks at conferences/workshops.
- Mentored graduate students, providing guidance and co-authoring scientific papers.
- Working knowledge of Sabermetrics.
- Fluent in English, French, and Italian.
- Canadian & EU Citizen US permanent resident.

# **CARE DEEPLY ABOUT...**

Teamwork • Communication • Sport Fairness • Resourcefulness • Curiosity Creativity • Diversity • Innovation

# LIFE PHILOSOPHY

A sign that you are living a meaningful life is when weekends come too quickly, rather than not quickly enough.

# **MOST PROUD OF**



Launching an International Workshop Series on Line-Intensity Mapping.



Designing the Parlee Z1/2/3 — a fully carbon fiber road bike frame — from the top-down.



Being Awarded time, along with \$150,000, by NASA to Lead a Space-Telescope Program.



Receiving the Kavli Fellowship at Stanford, which came with full autonomy.

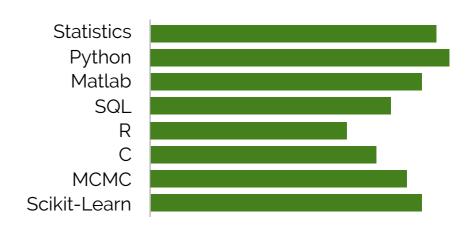


Seeing the BLAST balloon telescope project through, from initial design to Antarctic launch.



Winning Two World Championships with the Cornell Formula SAE Race Car Team.

### TECH



### **EDUCATION**

Ph.D. in Astrophysics

**University of Toronto** 

M.S. in Physics

**University of Pennsylvania** 

B.S. in Mechanical Engineering

**Cornell University**