

# JAMIE VOROS

## EDUCATION

### Massachusetts Institute of Technology

*BS Aerospace Engineering, 2016*

*BS Architecture, 2016*

GPA: 4.6/5.0

### The University of Colorado Boulder

*MS Aerospace Engineering, 2020*

*MS Computer Science, expected May 2022*

*PhD Aerospace Engineering, expected 2023*

GPA: 3.9/4.0

## SKILLS

*Extensive professional experience with*

### Languages

Python (scikit-learn, pandas), R, SQL, Matlab

### Visualization

Python (matplotlib), R (ggplot), Adobe Illustrator, Adobe Photoshop, Rhino

## OTHER

Licensed skydiver, U17 England

Lacrosse, PADI Divemaster

## CONTACT INFO

Mobile: +1 617 909 0628

Email: [jamielsv@gmail.com](mailto:jamielsv@gmail.com)

Website: [github.com/hamjamjam/](https://github.com/hamjamjam/)

## EMPLOYMENT EXPERIENCE

### Graduate Researcher

*The Bioastronautics Laboratory, CU | Jan 2019 - Present*

- Interfaced with NASA TRISH to study benefits of stochastic resonance (SR) in astronaut like subjects
- Showed statistically significant ( $p < 0.05$ ) improvement in visual perception with vestibular white noise
- Optimized experimental procedures shown by reducing experimental time by over 50% via monte carlo simulations
- Developed classification method that outperformed existing methods ( $p < 0.05$ ) by using simulated data to train ML algorithm
- Built simulation and verified its accuracy with data from real humans by modelling response to white noise stimulation
- Mentored of team of 5 undergraduate research assistants
- First author peer reviewed conference publication at IEEE Aero
- First author peer reviewed journal paper in progress

### Graduate Researcher

*ATLAS Institute, CU | Aug 2018 - Jan 2019*

- Made novel finding indicating trust in navigational assistance systems is agnostic to perceived source (human or algorithmic) by statistically analyzing multivariate human subject data
- Secondary finding that objective trust only matches self-reported trust in navigational assistance when the task is hard ( $p < 0.05$ ) by statistical analysis
- First author peer reviewed conference publication at IEEE Aero
- First author peer reviewed journal paper submitted to HFES

### Quantitative Trader

*IMC Financial Markets, Chicago | Aug 2016 - Aug 2018*

- Effectively parameterized trading algorithms as shown by positive PnL by predictive modelling of market movement
- Automated ETF position management process by developing trades analysis and position reporting tools
- Garden leave Sept 2017- Aug 2018

### Undergraduate Researcher, 3D Printing

*Lab. for Atomistic & Molecular Mech., MIT | Jun 2015 - Sep 2015*

- Designed and implemented system to 3D print artificial bone resulting in successful prints by adding pressure based extrusion system to a COTS plastic 3D printer
- Peer reviewed publication in JBME (80+ citations)