

# Kasper Johansson

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*This is a summarized version of my CV. For a more comprehensive overview, please reach out.*

## Education

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- Stanford University** **GPA 4.2 (4.0)**  
*Ph.D. Electrical Engineering* *2022–Present*  
○ Research topics: Convex Optimization; Quantitative Finance; Machine Learning.  
○ Advisor: Prof. Stephen Boyd.
- KTH Royal Institute of Technology** **GPA 5.0 (5.0)**  
*M.Sc. Program in Engineering Physics* *2018–2022*  
○ M.Sc. Machine Learning  
○ B.Sc. Engineering Physics
- École Polytechnique Fédérale de Lausanne**  
*Exchange Program* *2021–2022*  
○ Advanced courses in Stochastic Calculus; Machine Learning for Finance; Financial Big Data; Computational Finance; Quantitative Risk Management; Venture Capital.
- Stockholm School of Economics**  
*Business and Economics* *2019–2022*
- Stockholm University**  
*Mathematics* *2017–2018*  
○ Discrete Mathematics, Linear Algebra, Calculus, etc.
- Berkeley High School**  
*High School* *2016–2017*  
○ Graduated one year early. Five Advanced Placement classes.

## Internships and Work Experience

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- Harvard University, School of Engineering and Applied Sciences** *2022*  
*Research Fellow*  
○ Studied multi-armed bandits with locality constraints.  
○ Developed online learning algorithm, motivated by internet-providing drone on a network.  
○ Advisor: Prof. Na Li.
- Caltech, Department of Computing + Mathematical Sciences** *2021*  
*Research Intern*  
○ Three months research under the Summer Undergraduate Research Fellowship.  
○ Invented multi-agent decision-making tool and presented results to NASA JPL researchers.  
○ Advisor: Prof. Aaron Ames.
- COMSOL AB** *2019–2020*  
*Software Developer*  
○ Developed control modules for COMSOL Multiphysics Simulation Software.

## Publications

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### Conference Proceedings.....

- T. Zhang\*, **K. Johansson\***, N. Li. "Multi-armed Bandit Learning on a Graph." *Annual Conference on Information Sciences and Systems (CISS)*, Baltimore, 2023.
- **K. Johansson**, U. Rosolia, W. Ubellacker, A. Singletary, and A. D. Ames. "Mixed Observable RRT: Multi-Agent Mission-Planning in Partially Observable Environments." *IEEE International Conference on Robotics and Automation (ICRA)*, London, 2023.

### Journal proceedings.....

- **K. Johansson**, M. Ogut, M. Pelger, T. Schmelzer, S. Boyd. "A Simple Method for Predicting Covariance Matrices of Financial Returns." *Foundations and Trends in Econometrics*, 2023. Under review.

### Thesis.....

- **K. Johansson**. "Graph Bandits: Multi-Armed Bandits with Locality Constraints." Master's Thesis, Electrical Engineering and Computer Science, KTH Royal Institute of Technology, 2022.

## Awards and Distinctions

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### **The Sweden-America Foundation**

*Scholarship to support my PhD studies at Stanford* 2023

### **Nova Talent Student List**

*Top 10 Swedish students in Engineering and Technology* 2022

### **Lars Magnus Ericsson Research Foundation**

*Grant to support my research stay at Harvard* 2022

### **Henrik Goransson Sandviken's Foundation**

*Award to recognize my study results at KTH* 2022

### **Rudolph Carl Norberg Foundation**

*Scholarship to support my research stay at Harvard* 2022

### **Caltech Summer Undergraduate Research Fellowship**

*One of two selected KTH students* 2021

### **IRONMAN Portugal – Cascais**

*4 km swim, 180 km bike ride, 42 km run, all under 16 hours* 2021

## Computer Skills

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PyTorch, Keras, Julia, MATLAB, Python, R, Swift, SPSS Statistics, LaTeX

## References

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Available upon request.