Kasper Johansson

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

Education

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.

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.

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

Stockholm School of Economics **GPA 4.5 (5.0)**
Business and Economics *2019–2022*

Stockholm University **GPA 4.9 (5.0)**
Mathematics *2017–2018*
- Discrete Mathematics, Linear Algebra, Calculus, etc.

Berkeley High School **GPA 4.0 (4.0)**
High School *2016–2017*
- Graduated one year early. Five Advanced Placement classes.

Internships and Work Experience

Harvard University, School of Engineering and Applied Sciences
Research Fellow *2022*
- 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
Research Intern *2021*
- 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
Software Developer *2019–2020*

- Developed control modules for COMSOL Multiphysics Simulation Software.

Publications

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

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

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

References

Available upon request.