

EDUCATION

- **King Abdullah University of Science and Technology** Thuwal, KSA
Ph.D in Statistics Aug. 2015 – Dec. 2019
 - **Thesis:** Proposing efficient importance sampling estimators for the accurate performance analysis of wireless communication systems.
 - **Advisor:** Prof. Mohamed-Slim Alouini.
 - **Relevant Coursework:** Computational Multivariate Statistics, Stochastic Methods in Engineering, Machine Learning, Linear Models.
- **King Abdullah University of Science and Technology** Thuwal, KSA
Master of Science in Applied Mathematics and Computational Science Aug. 2013 – May 2015
 - **Thesis:** Implementing the Multilevel Monte Carlo (MLMC) method to accelerate the computation of the expected information gain in the context of Bayesian experimental design.
 - **Advisor:** Prof. Raul Tempone.
 - **Relevant Coursework:** Numerical Linear Algebra, Numerical Optimization, Numerical Methods for SDEs.
- **Ecole Polytechnique de Tunisie** La Marsa, Tunisia
Diplôme d'Ingénieur Sep. 2010 – June 2013
 - **Relevant Coursework:** Econometrics, Operations research, Data Analysis, Databases.
 - **Rank:** 1/50.

EXPERIENCE

- **Teaching Assistant** Aug 2017 - December 2018
King Abdullah University of Science and Technology Thuwal, KSA
 - **Probability and Random Processes:** Preparing/grading homeworks, quizzes and exams and giving tutorials.
- **Graduation Project** Feb - June 2013
King Abdullah University of Science and Technology Thuwal, KSA
 - **Uncertainty Quantification in European Options:** Quantifying the effect of uncertainty in the volatility of the market on the price of European options as well as the Delta hedging strategy.
- **Data Analyst Intern** Summer 2012
Société Magasin Général Tunis, Tunisia
 - **Retail Outlets Efficiency Analysis:** Analyzing the performance of the remodeled retail outlets using the Data Envelopment Analysis (DEA) method.

PUBLICATIONS

- Journals:
 - J1) C. Ben Issaid, M.-S. Alouini and R. Tempone, "Efficient Monte Carlo Simulation of the Left Tail of Positive Gaussian Quadratic Forms", submitted to IEEE Transactions on Wireless Communications, July 2019.
 - J2) C. Ben Issaid and M.-S. Alouini, "Level Crossing Rate and Average Outage Duration of Free Space Optical Links," in IEEE Transactions on Communications, June 2019.
 - J3) C. Ben Issaid, M.-S. Alouini and R. Tempone, "On the Fast and Precise Evaluation of the Outage Probability of Diversity Receivers Over $\alpha - \mu$, $\kappa - \mu$, and $\eta - \mu$ Fading Channels," in IEEE Transactions on Wireless Communications, vol. 17, no. 2, pp. 1255-1268, Feb. 2018.
 - J4) C. Ben Issaid, M.-S. Alouini and R. Tempone, "Efficient Simulation of the Outage Probability of Multihop Systems," in IEEE Photonics Journal, vol. 9, no. 6, pp. 1-8, Dec. 2017.
 - J5) C. Ben Issaid, K. Park and M. Alouini, "A Generic Simulation Approach for the Fast and Accurate Estimation of the Outage Probability of Single Hop and Multihop FSO Links Subject to Generalized Pointing Errors," in IEEE Transactions on Wireless Communications, vol. 16, no. 10, pp. 6822-6837, Oct. 2017.

J6) C. Ben Issaid, N. Ben Rached, A. Kammoun, M.-S. Alouini and R. Tempone, "On the Efficient Simulation of the Distribution of the Sum of Gamma–Gamma Variates With Application to the Outage Probability Evaluation Over Fading Channels," in IEEE Transactions on Communications, vol. 65, no. 4, pp. 1839-1848, April 2017.

- Conferences:

C1) A. Trichili, C. Ben Issaid, Y. Guo, T. K. Ng, Boon S. Ooi, M.-S. Alouini, "Detecting Underwater Laguerre Gaussian Modes using a Convolutional Neural Network," in OSA Advanced Photonics Congress (AP) 2019 (IPR, Networks, NOMA, SPPCom, PVLED), OSA Technical Digest (Optical Society of America, 2019), paper SpT2E.4.

C2) C. Ben Issaid, M.-S. Alouini and R. Tempone, "Efficient outage probability evaluation of diversity receivers over $\alpha - \mu$ fading channels," 2018 IEEE Wireless Communications and Networking Conference (WCNC), Barcelona, 2018, pp. 1-6.

C3) C. Ben Issaid, N. Ben Rached, A. Kammoun, M.-S. Alouini and R. Tempone, "On the sum of Gamma-Gamma variates with application to the fast outage probability evaluation over fading channels," 2016 IEEE Global Conference on Signal and Information Processing (GlobalSIP), Washington, DC, 2016, pp. 25-29.

C4) C. Ben Issaid, K. Park, M.-S. Alouini and R. Tempone, "Fast Outage Probability Simulation for FSO Links with a Generalized Pointing Error Model," 2016 IEEE Global Communications Conference (GLOBECOM), Washington, DC, 2016, pp. 1-7.

☰ COMPUTER SKILLS AND LANGUAGES

- **Computer Skills:** Python, SQL, Matlab, Command Line, Git, Keras, LaTeX.
- **Languages:** Native Arabic, Bilingual French, Fluent English.

“ REFERENCES

- Prof. Mohamed-Slim Alouini
 - Email : slim.alouini@kaust.edu.sa
 - Professor and Associate Dean at King Abdullah University of Science and Technology (KAUST)
- Prof. Ahmed Sultan Salem
 - Email: ahmed.salem@kaust.edu.sa
 - Senior Lecturer at King Abdullah University of Science and Technology (KAUST)