



# THE TECHNICAL UNIVERSITY OF KENYA

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School:	Business and Management Studies	
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## EDUCATION

LEVEL	QUALIFICATION NAME	INSTITUTION	YEAR
Masters of Science (M.Sc.)	COMPUTING AND INFORMATION SYSTEMS	STRATHMORE UNIVERSITY(Kenya)	2020
Masters of Science (M.Sc.)	MATHEMATICAL FINANCE	STRATHMORE UNIVERSITY(Kenya)	2018
Bachelor of Science (BSc)	FINANCIAL ECONOMICS	STRATHMORE UNIVERSITY(Kenya)	2016
O level/Equivalent	KENYA CERTIFICATE OF SECONDARY EDUCATION	STRATHMORE SCHOOL(Kenya)	2011

## WORK EXPERIENCE

PERIOD	INSTITUTION	POSITION
June, 2018 - Present	THE TECHNICAL UNIVERSITY OF KENYA	RESEARCH AND TUTORIAL FELLOW
Nov, 2016 - June, 2018	THE TECHNICAL UNIVERSITY OF KENYA	RESEARCH ASSISTANT

## GENERAL STATEMENT ON RESEARCH AREAS

Probability Modelling, Stochastic Analysis, Quantitative Finance, Algorithmic Learning, High Performance Computing

## CURRENT RESEARCH PROJECTS

Alternative Approaches for Derivatives Pricing	Financial Engineering, Risk Management, Applied Probability Modelling, Stochastic Finance
Accelerating Financial Computing on GPU-CPU Heterogeneous Architecture	GPU Acceleration, Parallel Financial Computing, High Performance Computing
Financial Modelling and Portfolio Optimization under Leptokurticity	Applied Probability Modelling, Stochastic Finance, Portfolio Allocation

SELECTED PUBLICATIONS

TITLE	LINK TO PULICATION
Exotic Derivatives Pricing Using Copula-based Martingale Approach, 2018	<a href="http://hdl.handle.net/11071/6052">http://hdl.handle.net/11071/6052</a>
Firm-level Heterogeneity for Profitability and Competitive Advantage, 2016	<a href="http://hdl.handle.net/11071/5020">http://hdl.handle.net/11071/5020</a>
A Decentralized Educational Prediction Market for Information Aggregation, Ideas Generation and Forecasting, 2020	<a href="https://www.gcec.org/winners">https://www.gcec.org/winners</a>
A Hybrid Predictive Prototype for Portfolio Selection Using Probability-based Quadratic Programming and Artificial Neural Networks, 2020 under review Journal of Applied Computer Systems.	<a href="https://content.sciendo.com/browse?t0=CO-03">https://content.sciendo.com/browse?t0=CO-03</a>
A Dynamic Parallel and Distributed Algorithm for Derivatives Pricing and Hedging, 2019	<a href="https://easychair.org/cfp/SIMC2019">https://easychair.org/cfp/SIMC2019</a>