



PERSONAL INFORMATION

Email hesham@heshamelsayed.com
City Frankfurt am Main
Nationalities Egyptian/German

SUMMARY

Data and technology specialist with a Doctorate in Computer Science and expertise in machine learning, statistical analysis, and large-scale software systems. Currently Assistant Vice President at Deutsche Bank applying quantitative analysis and technical expertise to audits of complex financial systems and the assessment of technology risk.

WORK EXPERIENCE



10/2023-today IT Auditor for AFC & Compliance

Deutsche Bank.

IT Audit & Risk - specialization in application development and security, technical control design and testing, and data-driven risk assessment.

- Conduct IT audits of critical banking systems focusing on application security, access controls, and SDLC compliance
- Identify technical control gaps and assist senior management in developing remediation strategies
- Perform data-driven risk assessments of complex large-scale financial systems

04/2018-03/2023 Research Fellow

Technical University of Darmstadt.

Research Fellow in Computer Science - specialization in Human-Computer Interaction. I developed and implemented complex software systems to conduct data-driven experimental research on how people interact with technology.

- Published 8+ peer-reviewed papers (150+ citations) at leading academic journals and conferences
- Designed and developed experimental software platforms for human-technology interaction studies
- Supervised bachelor and master theses and was involved in teaching activities
- Led research projects from design through technical implementation



05/2018-04/2022 External Doctoral Researcher

Honda Research Institute Europe.

Developed software systems for haptic feedback and virtual/augmented reality interaction experiments.



07/2017-01/2018 Master's Student

Daimler AG.

Master's student working on a topic at the intersection of the following research areas: data mining, time series analysis, unsupervised machine learning, and extraction of driving scenarios from sensor data. My work during this thesis resulted in a patent titled [Verfahren zum Testen eines Bremsassistentensystems für ein Fahrzeug](#).

EDUCATION

	04/2018-03/2023	Technical University of Darmstadt
<i>Dr. rer. nat.</i>		Doctorate in Computer Science. Grade: sehr gut bestanden (magna cum laude)
	10/2015-02/2018	University of Stuttgart
<i>M.Sc.</i>		Master's degree in Information Technology. Grade: 1.3 (thesis), 1.8 (overall)
	09/2010-09/2015	German University in Cairo
<i>B.Sc.</i>		Bachelor's degree with honours at the faculty of Media Engineering and Technology majoring in Computer Science and Engineering. Grade: 1.0 (thesis), 1.4 (overall)
	09/2007-06/2010	University of Cambridge (IGCSE)
<i>IGCSE</i>		International General Certificate of Secondary Education: 8 O levels and 2 A levels – all with the highest possible grade.

OTHER INFORMATION

<i>Programming languages</i>	Python, Java, SQL
<i>Technical Skills</i>	Data Analysis: Statistics including Machine Learning, NLP and Time Series Analysis IT Risk: SDLC controls, privileged access management, data transfer between systems, application security Tools: Git, Linux Audit / Compliance: ITGC, control testing
<i>Achievements and Awards</i>	2020-2022 · Graduate of the Software Campus program for future IT executives 2015-2017 · DAAD scholarship for academic purposes in Germany 2010-2015 · Scholarship from the German University in Cairo for excellent performance
<i>Languages</i>	English – Fluent, German – Fluent, Arabic – Native