Kamal Bouhassoune

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Paris, France

In a context increasingly shaped by the mitigation of risks associated with generative intelligence, my research interests encompass:

- Decentralized and Peer-to-Peer networks.
- Security and privacy.
- Game theory applied to system modeling.

Degrees

Ph.D. in Computer Science — Nov. 2024
Hassan First University, Faculty of Sciences and Techniques of Settat, Greater Casablanca Region, Maroc
Thesis: *Study and Moel Value-Driven Blockchain smart Contracts for Cooperative Enterprise Information Systems.*
Professors *Sam Goundar* and *Abdelkrim Haqiq*.

Master of Science in Strategy and Business Development — Oct. 2013
Edhec Business School de Lille, 24 Av. Gustave Delory, 59100 Roubaix, France

Master of Engineering Computer Science and Statistics — Oct. 2006
Ecole Polytechnique Universitaire de Lille, Av. Paul Langevin, 59655 Villeneuve-d'Ascq, France
Via preparatory classes, Mathematics et Physics, Lycée Paul Eluard, Saint-Denis, France

Baccalaureate in Mathematics and Physics, Oujda, Morocco — Jun. 2001

Experiences

Teaching and Research. *Cnam Paris* (Conservatoire National des Arts et Métiers) — Apr. 2026 - Present
Teaching and Research Fellow, Cedric laboratory, Networks and IoT Systems (ROC team). — *Paris, France*

- Teach programming language, network and databases systems.
- Conduct research in the fields of security and privacy of distributed systems.

Research. Hassan First University, Faculty of Sciences and Techniques of Settat — Sep. 2018 - 2026
PhD. and associate member, Computer science, Networks, Mobility et Modeling Laboratory — *Greater Casablanca, Morocco*

- Conduct research in the fields of distributed systems.
- Publish findings in peer-reviewed and indexed journals and present at international conferences.
- Mentor graduate and undergraduate students in related research areas and corporate internships.
- Contribute to the organization of international conferences.

Lecturing. EFREI Paris Engineering School, Paris Panthéon Assas University — Sep. 2016 - 2018
Lecturer, Software Engineering and Business Intelligence Departments — *Villejuif, Greater Paris, France*
200+ hours | Lectures, seminars, projects, and grading | master's level | English

- Introduction to Business Intelligence et Analytics (ST2IBI) | Master 2 | Spring 2018
  - Instructed students in the principles of construction and modeling for BI systems.
  - Guided the examination and comparison of tool families for creating dictionaries, models, and data feeds.
  - Taught techniques for decisional (data warehouse) modeling.
- Collaborative Tools and Platforms (ST2CT) | Master 2 | Fall 2017
  - Instructed on configuring and customizing the presentation and business logic layers of enterprise software suites.
  - Technical stack: Java, JavaScript, XML, XSL, Cvs/Svn, Git/GitHub
- Entreprise Risk Management (ST2GRE) | Master 2 | Fall 2017
  - Assumed teaching responsibilities following a colleague's medical leave.
  - Evaluated and graded student examinations.
- Big Data Processing and Visualization (ST2BDPV) | Master 1 | Spring 2017
  - Directed research on data-driven processing and decision-making solutions.
  - Supervised the construction of data models and related reports.
  - Technical stack: Oracle, SQL, Git/GitHub, Talend.
- Advanced Databases (ST2BDA) | Master 1 | Fall 2016 and 2017
  - Delivered instruction on database systems, covering relational and non-relational (NoSQL) models
  - Provided training in SQL and PL/SQL development, and essential Oracle database administration.

Internship supervision, Information Systems and Architecture Department.

- Monitored Master 2 students progress and validated acquired competencies through report assessment and thesis defense.
  - Supervised 6 Master 2 students | Spring 2018
  - Supervised 2 Master 2 students | Spring 2017

Industry. Enterprise Resource Planning integration and software development 2017 - 2025

Associate Consultant: Inneosoft | Agilinfo *Greater Paris Region and Lille*

Retail and Supply chain *(4 years): Les Mousquetaires, Bricorama France | Siplec E. Leclerc | Jardiland*

- Lead IT transformation projects (resource management, budget advocacy, meeting deadlines)
- Migrated and deployed software packages for sales management, warehouse management, EDI, and the group data repository.
- Defined, specify, and develop new software modules for traceability and performance monitoring.
- Provided training at central purchasing offices, warehouses, and retail locations.

Healthcare *(2 years): Ramsay Santé | Elsan*

- Determined indicators and ratios for medical procurement and prepared financial control audits.
- Migrated group databases and improved tracking and traceability mechanisms for surgical implants.
- Trained physicians, healthcare and surgical preparation staff

Energy *(2 years): Enedis, French Electricity Distribution Network.*

- Defined requirements based on feedback from the 25 regional divisions
- Overhauled the monitoring of High Voltage A projects and associated fixed assets
- Led the development and acceptance testing, and assisted with the rollout across France

Independent Consultant: Kerneos (Lafarge) | Ramsay Générale de Santé | Top office 2013 - 2017

- Analyzed requirements and translated them into technical and functional specifications.
- Implemented procurement projects and promoted mobile solutions.
- Led technical migration and stabilization projects for critical systems.

From Developer to Delivery manager: Generix group, Software editor | 20+ clients et partners 2006 - 2012

- End-to-end implementation of the suite of software for central sales management, WMS, EDI exchanges.
- Identify areas for improvement during migration audits, performance scaling, and application scope expansion.
- Provided technical expertise to development and implementation teams
- Led technical pre-sales and facilitated rapid, structured skill development within the client's scope

Technical stack: Three-tier architecture | Java APIs and microservices | Oracle SQL | JavaScript, XML, XSL

Responsibilities et participations

Reviewer, International Journal of Blockchains and Cryptocurrencies (IJBC) 2020 - *Present*

- Review manuscripts on blockchain technologies, their applications, and regulations.
- Evaluate submissions according to criteria of Inderscience journal publisher.

The 4th Int. conference on Artificial Intelligence and Smart Data Science (AISDS'2025) Marrakesh, Marocco Dec. 2025

- Presented our contribution in the session "AI for Security and Trustworthy Systems".
- Chaired two sessions, *AI for Computer Vision & Image-Based Applications* and *AI for Security & Trustworthy Systems*
- Reviewed papers as a member of the Technical Program Committee.

The 3rd Int. conference on Artificial Intelligence and Computer Vision, Marrakesh, Marocco Mar. 2023

- Received and coordinate with the Indian delegation.
- Contributed to logistical and organizational activities.

Faculty Development programs

- Open **Confidential Computing** Conference (OC3), Berlin, Germany Mar. 2026
- Gen AI and Agentic AI: Redefining Intelligence for Tomorrow. BN Institute of Technology, Bangalore, India Nov. 2025
- The 3rd Edition of the TUM **Blockchain** & **Cybersecurity** Salon, Technische Universität München, Germany Mai. 2025
- Multimodal Generative AI: Techniques and Applications. Benett University, Noida, India Mai. 2025
- Mean-Field **Game Theory** and blockchains (*Prof. Tembine*). Winter School Ensias, Rabat, Moroc Jan. 2024
- Understanding Embeddings for Natural Language Processing. Open HPI, Potsdam, Germany Mar. 2024
- Knowledge Graphs - Foundations and Applications. Open HPI, Potsdam, Germany Oct. 2023
- **Quantum** Machine Learning with IBM Quantum. Open HPI, Potsdam, Germany Fev. 2023
- One Week Python Programming Workshop. JIS College of Engineering, India Aug. 2021
- An Introduction to **Process Mining** (*Pr. Mathias Weske*). Open HPI, Potsdam, Germany Mai. 2021

Capabilities

Trilingual on English, French and Arabic.

Computer science:

- Programming**:** C | Java | PL/SQL | Python | JavaScript | Solidity and Rust
- Platforms et tools**:** Jupyter Notebook | Git/GitHub
- Entreprise Resource Planning : SAP | Oracle JD Edwards | Generix suite
- Data processing: Python | R | MS VBA

Management:

- Industry: Retail and Supply chain | Healthcare | Energy
- Project management: Budget monitoring and defense | Technical audit and coordination.
- Process and software engineering: ERP and WMS expertise | Migration | End-to-end deployment and implementation.
- Knowledge transfer: Training | Stakeholder support | Dissemination of change and innovation.

Publications

Journal:

- **Bouhassoune, K.**, Goundar, S., Haqiq, A. (2025) Blockchain-enabled Peer-to-peer Value Capture: a Fair Transaction Mechanism. IAENG International Journal of Computer Science. Vol. 52(11), pp. 4280-4290.

Springer book chapter:

- **Bouhassoune, K**., Goundar, S., Haqiq, A. (2024). Classification of Sources for Blockchain Value Creation: A Review of Financial Technology Taxonomies. In: Hassanien, A.E., Zheng, D., Zhao, Z., Fan, Z. (eds) Business Intelligence and Information Technology. BIIT 2023. Smart Innovation, Systems and Technologies, vol 394. Springer, Singapore
- **Bouhassoune, K.**, Goundar, S., Haqiq, A. (2022). Blockchain for Smart Healthcare: A SWOT Analysis from the Patient Perspective. In: Abraham, A., Pllana, S., Casalino, G., Ma, K., Bajaj, A. (eds) Intelligent Systems Design and Applications. ISDA 2022. Lecture Notes in Networks and Systems, vol 716. Springer, Cham.

Conference:

- **Bouhassoune, K**., Goundar, S., Haqiq, A. (2025) Towards Secure and Auditable Agentic AI Using Blockchain: A Review and Taxonomy. In the proceedings of the 4th International Conference on Artificial Intelligence and Smart Data Science. (under publication).