

# Naheel Faisal Kamal

Website: [naheel.xyz](http://naheel.xyz)

Cell Phone: \_\_\_\_\_

Email: \_\_\_\_\_

Address: \_\_\_\_\_

[linkedin.com/in/naheel-faisal-kamal](https://www.linkedin.com/in/naheel-faisal-kamal)

Updated as of January, 2025

## Education

- **Ph.D. Computer Engineering**, Electrical and Computer Engineering, Texas A&M University  
Aug. 2022 - May 2025
- **Master of Science in Computing, Computer Engineering**, College of Engineering, Qatar University  
Aug. 2019 - July 2021
- **Bachelor of Science in Computer Engineering**, College of Engineering, Qatar University  
Aug. 2015 - July 2019

## Work Experience

- **Research assistant** at Texas A&M University
  - **Aug. 2022 - present**  
Private and secure EV charging communication system development, OCPP backend and frontend software development, and power electronics protocol integration
- **Teaching assistant** at Qatar University
  - **Aug. 2021 - May 2022**  
Instructing labs in the Computer Science and Engineering department: *Computer Engineering Practicum*, *Operating Systems*, and *Programming Concepts*
- **Research assistant** at Qatar University
  - **Dec. 2021 - Aug. 2022**  
Privacy-preserving data aggregation in smart grids
  - **Nov. 2020 - Jan. 2021**  
Privacy-preserving crowdsourcing application development of the *Qaution* project
  - **July 2020 - Aug. 2020**  
Software debugging and refactoring in the *garbled computing* project
  - **Feb. 2020 - July 2020**  
Secure sharing in cloud systems for the *SafeDrive* project
  - **Sept. 2019 - Nov. 2019**  
Data extraction from LIFEPAK15 for the *EMBIOT* project
  - **June 2018 - April 2019**  
Software development of the secure cloud storage system the *SafeDrive* project
- **Software Developer** at Being You QSTP-LLC
  - **June 2021 - Aug. 2021**  
Development, testing, deployment, and maintenance of company's virtual try-on services
- **Intern** at Qatar Computing Research Institute
  - **July 2018 - Aug. 2018**  
Convert semi-structured data to RDF in the *Arabic Knowledge Base* project
- **Technical support** at Qatar University IT Services Department
  - **Dec. 2016 - May 2018**  
Configuring, repairing, and troubleshooting computers hardware and software

## Skills and Experiences

- Backend and frontend software development for EV charging stations
- Electric vehicles' communication protocols
- Electronics, microcontrollers, FPGAs, and digital logic
- Machine learning and deep learning
- Blockchain with Ethereum and Solidity
- Linux and Unix-based operating systems, shell scripting, and various development tools
- Web development using HTML, CSS, and JavaScript in addition to experience in Node.js for backend development
- Various programming languages including C, C++, Java, Python, MATLAB, ARM Assembly, and others

## Awards and Recognition

- **Best Oral Presentation Award**, International Conference on Sustainable Energy-Water-Environment Nexus in Desert Climates (ICSEWEN'23), 30th Oct.-2nd Nov., 2023, Doha-Qatar.
- **Third Place**, Senior Design Contest, 2019, Qatar University, Qatar.
- **Excellence Prize**, Huawei ICT Competition, 2017, Huawei HQ, Shenzhen, China.
- **Best Design**, Carnegie Apps Hackathon, 2016, Carnegie Mellon University, Qatar.

## Publications [IEEE Xplore](#) - [Google Scholar](#) - [Research Gate](#)

1. N. F. Kamal, et al., "Novel Adaptive Energy Management Technique for Multi-Port Fast EV Chargers," in *IEEE Transactions on Industrial Electronics*, vol. 72, no. 1, pp. 559-569, Jan. 2025, doi: 10.1109/TIE.2024.3409896.
2. N. F. Kamal, et al., "Private Metering in EV Charging Infrastructure: An OCPP Extension," in *IEEE Transactions on Vehicular Technology*, vol. 73, no. 10, pp. 15456-15466, Oct. 2024, doi: 10.1109/TVT.2024.3403455.
3. N. F. Kamal, et al., "LPPDA: A Light-Weight Privacy-Preserving Data Aggregation Protocol for Smart Grids," in *IEEE Access*, vol. 11, pp. 95358-95367, 2023, doi: 10.1109/ACCESS.2023.3311140.
4. N. F. Kamal, et al., "Digital-Twin-Based Diagnosis and Tolerant Control of T-Type Three-Level Rectifiers," in *IEEE Open Journal of the Industrial Electronics Society*, vol. 4, pp. 230-241, 2023, doi: 10.1109/OJIES.2023.3290169.
5. N. F. Kamal, et al., "Electric vehicles fast charging stations: Infrastructure, control, and grid interaction - a comprehensive review," *Proceedings of the IEEE - Under review*.
6. N. F. Kamal, et al., "Adaptive Fault-Tolerant Communication Based-Control for Parallel Connected Rectifiers," in *IEEE Open Journal of the Industrial Electronics Society*, vol. 4, pp. 709-719, 2023, doi: 10.1109/OJIES.2023.3342071.
7. N. F. Kamal, et al., "Enhancing electric vehicle charging predictions: A physics-informed neural network approach," in *IECON 2024-50th Annual Conference of the IEEE Industrial Electronics Society*, pp. 1-6, 2024.
8. N. F. Kamal, et al., "Light-Weight Secure CAN-Bus Communication for Supervisory Control of Power Converters-Based Microgrid Applications," *IECON 2023- 49th Annual Conference of the IEEE Industrial Electronics Society*, Singapore, Singapore, 2023, pp. 1-5, doi: 10.1109/IECON51785.2023.10312673.
9. N. F. Kamal, et al., "Low-cost Digital Twin Design for Power Electronics using Deep Neural Networks," 2024 4th International Conference on Smart Grid and Renewable Energy (SGRE), Doha, Qatar, 2024, pp. 1-6, doi: 10.1109/SGRE59715.2024.10428716.
10. N. F. Kamal, et al., "Decentralized Private Peer-to-Peer Energy Trading using Public Blockchains," 2024 4th International Conference on Smart Grid and Renewable Energy (SGRE), Doha, Qatar, 2024, pp. 1-6, doi: 10.1109/SGRE59715.2024.10428894.
11. N. F. Kamal, et al., "Scalable Light-weight Anomaly Detection for Data of Individual Smart Meters," 2024 4th International Conference on Smart Grid and Renewable Energy (SGRE), Doha, Qatar, 2024, pp. 1-6, doi: 10.1109/SGRE59715.2024.10429010.

12. N. F. Kamal, et al., "Open-Switch Fault Detection and Tolerant Control Based on DC Link Voltage Observation for T-type Rectifiers," 2023 IEEE Energy Conversion Congress and Exposition (ECCE), Nashville, TN, USA, 2023, pp. 6595-6599, doi: 10.1109/ECCE53617.2023.10362837.
13. N. F. Kamal, et al., "Light-weight Communication Fault Tolerant OCPP-based EV Supply Equipment," 2023 IEEE 17th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG), Tallinn, Estonia, 2023, pp. 1-6, doi: 10.1109/CPE-POWERENG58103.2023.10227456.
14. N. F. Kamal, et al., "Client-Based Secure IoT Data Sharing using Untrusted Clouds," 2021 IEEE 7th World Forum on Internet of Things (WF-IoT), New Orleans, LA, USA, 2021, pp. 409-414, doi: 10.1109/WF-IoT51360.2021.9595517.
15. N. F. Kamal, et al., "An IoT Reconfigurable SoC Platform for Computer Vision Applications," 2019 International Symposium on Systems Engineering (ISSE), Edinburgh, UK, 2019, pp. 1-7, doi: 10.1109/ISSE46696.2019.8984462.
16. N. F. Kamal, et al., "Faheem: A Tablet-Based Application to Improve Receptive Language for Arab Autistic Children," 2018 International Conference on Computer and Applications (ICCA), Beirut, Lebanon, 2018, pp. 248-252, doi: 10.1109/COMAPP.2018.8460413.

## Patent Applications

1. N. F. Kamal, et al., "Power electronics protocol translator apparatus for fast electric vehicle chargers." US Patent Appl. 63/662,852, 2024

## Reviewer in

- IEEE Transactions on Industrial Electronics
- IEEE Transactions on Smart Grid
- Annual Conference of the IEEE Industrial Electronics Society (IECON)
- International Conference on Smart Grid and Renewable Energy (SGRE)

## Professional Memberships

- IEEE Membership
- IEEE Industrial Electronics Society