12 January 2026

Letter of Testimonial

To Whom It May Concern,

I am pleased to write this letter of recommendation for Nur Sarah Binte Mohamed Rafiq, who has been an outstanding employee at our company since joining us in May 2025. During a relatively short period of time, she has demonstrated exceptional ability in both software and hardware engineering, along with strong intellectual curiosity, initiative, and a genuine passion for tackling complex technical challenges. Her contributions have had a measurable and lasting impact on our manufacturing and inspection operations.

From the very beginning of her employment, Sarah quickly adapted to our mass-production environment and immediately began working on product inspection tasks. Rather than limiting herself to routine execution, she carefully analyzed existing workflows and proactively sought opportunities for improvement. This analytical mindset reflects strong academic foundations in engineering principles, particularly in systems optimization, automation, and applied computing.

In June 2025, Sarah developed a macro that automatically processes command sets for serial console operations required in product inspection. This solution dramatically reduced the time required for serial console–based tasks to one-fifth of the original duration, while also virtually eliminating operator errors. The project showcased her solid understanding of software engineering, scripting, and interface control, as well as her ability to translate abstract technical knowledge into practical, high-impact tools.

In July 2025, she further demonstrated her interdisciplinary engineering skills by developing a manufacturing serial number identification tool. Previously, operators manually identified serial numbers through visual inspection and entered them into the system by hand. Sarah replaced this process with a serial number reading solution using a smartphone camera, successfully reducing operational errors to nearly zero. This achievement reflects her ability to integrate software logic, image-based input, and practical hardware usage into an effective engineering solution.

Sarah also showed strong system-level and academic thinking in September 2025. As inspection data volume increased, she recognized the limitations of managing results using spreadsheets and proactively proposed migrating to a database base system. She applied and customized the Redmine system to better suit our inspection workflow, developed a working prototype, and conducted a demonstration. This effort demonstrated her understanding of data management, software customization, and engineering-oriented system design.

During the same period, Sarah designed and fabricated a dedicated case for an inspection jig she had developed, using a 3D printer to improve usability and handling. This work showcased her hands-on experience with mechanical design, prototyping, and user-focused engineering.

In November 2025, to support real-world deployment of the Redmine system, Sarah independently set up and launched a dedicated server for production use. This final step exemplifies her end-to-end engineering capability—from concept and design to implementation and operation—grounded in both theoretical understanding and practical execution.

In summary, Sarah combines strong academic potential with proven practical engineering achievements. Her ability to learn quickly, think critically, and apply engineering knowledge across software, hardware, and manufacturing systems makes her an excellent candidate for advanced study in engineering. I am confident that she will thrive in a rigorous academic environment and continue to make meaningful contributions to the engineering field.

Sincerely yours,

Keiji Terasaka
Engineer
Mobility Business Unit
Mitsubishi Heavy Industries

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