# Mohamed Kais

#### **ABOUT ME** -

Dedicated Mechanical & Manufacturing Engineer with a strong background in designing and optimizing mechanical systems for enhanced performance. Proficient in CAD/CAM software and experienced in implementing lean manufacturing principles. Committed to delivering high-quality products and driving process improvements. Excited to bring my skills and expertise to contribute to your company's success.

#### **EDUCATION** -

## B.Sc. Eng. (Hons) in Mechanical and Manufacturing Engineering

2025

University of Ruhuna, Galle, Sri Lanka

√ Related coursework: Mechanics of Materials, Thermodynamics, Fluid Mechanics, Heat Transfer, Manufacturing Processes, Machine Design, CAD/CAM, Engineering Drawing, and more.

#### Advanced Level (A/L)

2019

T/T/Pulmoddai Muslim Central College, Trincomalee, Sri Lanka

√ Subjects: Combined Mathematics (A), Physics (B), Chemistry (A), General English (C)

#### **RESEARCH PROJECTS** —

#### **Enhanced Fruit Picker**

- ✓ Designed and developed an enhanced fruit picker to improve efficiency and reduce damage to fruits during harvesting.
- ✓ Utilized CAD software to create detailed 3D models of the picker and conducted simulations to optimize its design.
- ✓ Collaborated with a team of engineers to test and refine the prototype, ensuring its effectiveness in real-world scenarios.

#### **PRESENTATIONS** –

- ✓ "Design and Analysis of an Enhanced Fruit Picker", Mechanical Engineering Department Seminar, University of Ruhuna, Galle, Sri Lanka (2024)
- ✓ "Introduction to Lean Manufacturing Principles", Workshop for Engineering Students, University of Ruhuna, Galle, Sri Lanka (2023)

#### SKILLS ---

#### Computational

- MATLAB:
- ✓ Implemented numerical methods for solving engineering problems, such as finite element analysis.
- ✓ Analyzed data to identify trends and patterns related to system performance.
- SOLIDWORKS:
- ✓ Developed detailed 3D models of mechanical systems, including assemblies and components.

- √ Utilized SOLIDWORKS simulations to analyze the performance and strength of designs.
- ✓ Created technical drawings and documentation for manufacturing purposes.
- SKETCHBOOK:
- ✓ Developed freehand sketches to communicate design ideas and concepts.
- $\checkmark$  Utilized sketching techniques to explore various design options and refine concepts.
- AUTOCAD:
- ✓ Created 2D drawings and technical illustrations for manufacturing and documentation purposes.
- ✓ Utilized AUTOCAD's drafting tools to create precise and detailed designs.

#### **Problem Solving**

- √ Analyzed complex engineering problems and identified root causes.
- ✓ Developed innovative solutions that met design requirements and improved system efficiency.
- ✓ Evaluated the feasibility and effectiveness of proposed solutions.

## **Software Proficiency**

- MS Excel:
- ✓ Developed spreadsheets for data analysis, tracking, and reporting.
- ✓ Utilized formulas and functions to automate calculations and improve efficiency.
- MS Word:
- ✓ Created technical reports, presentations, and other documents.
- ✓ Applied formatting and styles to ensure professional document presentation.
- Photoshop:
- ✓ Edited and manipulated images for technical illustrations and presentations.
- ✓ Created visual aids and infographics to enhance communication.
- Illustrator:
- ✓ Developed vector graphics for technical drawings, logos, and branding materials.
- ✓ Utilized Illustrator's tools to create scalable and high-quality visuals.
- InDesign:
- ✓ Designed and formatted brochures, leaflets, and other marketing materials.
- ✓ Utilized InDesign's layout features to create visually appealing and professional publications.
- Premiere Pro:
- ✓ Edited and produced videos for technical presentations and marketing purposes.
- ✓ Utilized Premiere Pro's editing tools to create engaging and informative videos.

#### Languages

English: ExcellentTamil: NativeSinhala: Fluent

#### **PROFESSIONAL QUALIFICATION -**

#### **EXPERIENCE** —

# Football Team Player

Mar 2022 - Present

University of Ruhuna, Galle, Sri Lanka

- ✓ Demonstrated teamwork and sportsmanship skills while representing the university in football matches.
- ✓ Developed strategic thinking and tactical decision-making skills.
- ✓ Promoted a positive and collaborative environment within the team.

# **EXTRACURRICULAR ACTIVITIES -**

# **Teacher for Physics and Mathematics**

Present

Volunteer

- ✓ Provided educational support to students in Physics and Mathematics.
- ✓ Implemented engaging teaching methods to enhance student understanding.
- ✓ Developed and delivered study materials to aid students in their learning.

References available upon request.