

# VIKNESWARAN JAYARAMAN

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## Professional Profile

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Highly-motivated Mechanical Design Engineer with over six (6) years experience in design, development, analysis, experimentation and testing. Demonstrated competency in leading multiple projects. Strong background in Building Maintenance Unit (BMU) systems and industrial warehouse equipment. An accomplished BEM registered professional with powerful problem-solving, analytical and communication skills with proven capability to multitask within fiercely competitive and fast-paced environments, ensuring timely completion of projects without compromising quality.

## Key Skills

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- Solidworks® 3D Modeling
- Autodesk® Inventor 3D Modeling
- AutoCAD® Drafting Techniques
- AutoCAD® Technical Drawing
- LS-DYNA® FE analysis
- ANSYS® Fluent® Analysis
- SAP System®
- Lotus Notes®
- Microsoft Project®
- Microsoft Office®

## Relevant Experience

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### *AutoCAD Software Utilization*

- Produced drawings and maintained, archived and retrieved CAD files and drawing documents for the completion of numerous commercial and residential projects.
- Total of 13 years experience in AutoCAD® mechanical modeling and drafting.

### *Drafting Technique*

- Prepared sheet metal fabrication drawings, modifications and commercial specification drawings in compliance with company drafting standards.

### *Project Management*

- Supervised project production efforts to ensure projects were completed to company standards, on time and within budget constraints.
- Attended site meetings with clients and main contractors.

### *Project Coordination*

- Provided drafting and project set-up support to the communications staff, creating initial to final drawings for BMU engineering projects.

### *Consultation*

- Advised suitable and feasible BMU system for newly tendered projects.
- Monitor project proposal progress and rectify initial problem faced in projects.

### *Calculation and Analysis*

- The ability to do conventional and computational calculation on stress, strain, shear and deflection in reference and according to BS standards.

### *Research*

- A study on energy absorption capability of frontal longitudinal rail for automotive structure was carried out using LS-DYNA FE software.

### *CAD Training*

- Supervised and trained associate drafters.
- Organized and delegated projects according to co-workers abilities.

## **Work Experience**

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**Position: Regional Design Engineer 1**

**April 2011 - Present**

**Department: Industrial Product Division (IPD)**

**Company: MHE-Demag (M) Sdn Bhd – Bukit Raja, Klang**

**Nature of Business: Engineering, Sales & Service**

### **Job Scope & Responsibilities:**

- Consulted and proposed appropriate and suitable BMU system for new BMU projects.
- Prepared MS Powerpoint® presentation slides for tender interviews for sales team.
- Prepared Building Maintenance Unit (BMU) proposal drawing for newly tendered projects.
- Designed BMU operation such as BMU tracks, monorail brackets and trackless system after receiving supplier's drawing and specification.
- Drafted BMU system shopdrawings and technical drawings such as plan layout, elevation drawings, section drawings, machine drawing, restraint position and restraint details for architecture, façade consultant, main contractor and client for submission.

- Done calculation for I-Beam track and monorail bracket for professional engineer's (PE) endorsement using spreadsheet and conventional method according to BS standard.
- Studied structural analysis test on designed components in Solidworks® and Inventor®.
- Analyzed mechanical systems, including Finite Element (FE) analysis for structural, fatigue, deflection, stress and shear.
- Executed material and parts procurement and requisition entry by using SAP® system.
- Supervised and monitored the fabrication for monorail system BMU type Chameleon cradle and Eagle trolley machine at production workshop.
- Assisted project engineer and site supervisor to monitor BMU installation at project site.
- Conducted Building Maintenance Unit (BMU) track construction site inspection and machine testing.
- Ensured all safety guidelines are met and complied to OSHA 18001 policies.
- Prepared QA documentation and conducted QC inspection and testing before final approval to deliver to site.
- Attended project meetings and liaised with main contractors at construction site.
- Filing and organized approval and approved drawings and documents from architect firm systematically.
- Prepared dock leveller's approval drawings according to clients and project engineer specification.
- Produced dock leveller's manufacturing drawings upon receiving purchase order from clients.
- Prepared dock shelter, sectional door and high speed door approval drawings according to clients and project engineer specification.
- Prepared clearance drawing for aerial working platforms, cherry picker, mobile stackers and boom lifts.
- Conducted inspection, testing and QC for industrial table lift and scissors lift.
- Communicated with outside vendors and suppliers for component selection, manufacturing, and assembly.
- Collaborated with project engineers to implement operating procedures and resolved impending malfunctions.
- Performed quality assurance prior to delivery of final work to clients.
- Collaborated with engineers and project managers regarding design parameters for client BMU projects.
- Consulted with product manager and design director on improvement and new IPD products development.
- Researched suppliers of raw materials and finished goods and collaborated with purchasing department to obtain samples for process validation and functionality.
- Performed technical analysis and economic studies of cost, operation and safety aspects of production facilities.

- Utilized SAP® system software to access inventory, place order and time sheet management.
- Committed to strive toward Quality, Safety, Health, Environment and Information (QSHEI) in order to meet customer's expectation.
- Complied with OSHA 18001 and Implement Safety and Health enhancement measures.
- Adhered to ISO 9001, 18001, 14001 and 27001 standards and other safety guidelines.

**Achievement:**

- Successfully completed BMU projects such as The Intermark's Intergra Tower, Everlyn Hotel Putrajaya, Menara Bank Rakyat, St. Regis Hotel, Menara Hap Seng, Menara Boustead, Menara Technip, IB Tower, Smart Tunnel, Glomac Block D Damansara, Felda Apartment Bangi, KL Eco City BO and Lot A CIMB Tower KL Sentral.
- Ongoing projects are Melawati Mall, Equatorial Hotel, KL Eco City OT3 and Star Residence, KL.
- New MHE-Demag branded dock leveller design for Australian market.

**Recognition:**

- Awarded the certificate of appreciation and trophy for contributing and assisting Sales Department to exceed 2015 Sales target of SGD25 million for Regional IPD Product Orders.

**Career Movement in MHE-Demag:**

- Promoted to Regional Design Engineer 1 (Grade E2) from Regional Design Engineer 2 (Grade E3) on December 2013.

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**Position:** R&D Manager  
**Department:** Research & Development (R&D)  
**Company:** Jasapadu Industri Sdn Bhd – Batu Belah, Klang  
**Nature of Business:** Sales & Furniture Manufacturing

**April 2010 – March 2011**

**Job Scope & Responsibilities:**

- Prepared Technical or Production drawing from new built-up sample and new concept.
- Prepared Assembling Instruction or Guide drawing knock-down furniture set.
- Draw 3D model for new furniture and hardware.
- Prepared Bill of Material (BOM) for existing models and upcoming new product.
- Prepared and drafted the assembling guide and production drawing for packaging.

- Created, organized and managed work schedule for furniture sample makers.
- Setting up showroom and interior design for customer visit.
- Involved in Quality Control and inspection for finished product on assembly line
- Supervised and monitored R&D department sample makers on new samples quality and functionality.
- Liaised with suppliers regarding hardware and material cost management and component selection.
- Prepared the drilling mold and jig drawing for assembly line and R&D sample makers.
- Prepared the accessories drawing for purchasing department for requisition and external sourcing.
- Prepared and drafted the 3D models for new and existing product for the preparations of cutting and frame drawing.
- Supervised and monitored R&D department sample makers on new samples quality and functionality.

**Achievement:**

- Significantly reduced idle time of workers at spraying and finishing booth by eliminating bottleneck at sanding and assembly workstation.
- Introduced new rubber wood panel drawings and managed to reduce wastage and cost involved.
- Participated in Malaysia Furniture Fair & Exhibition (MIFF) at Seri Kembangan, KL

**Position: R&D Supervisor**

**March 2009 – March 2010**

**Department: Research & Development (R&D)**

**Company: Latitude Tree Furniture (M) Sdn Bhd – Jalan Kapar, Klang**

**Nature of Business: Sales & Furniture Manufacturing**

**Job Scope & Responsibilities:**

- Prepared Technical or Production drawing from Bill of Material (BOM).
- Drafted 3D model for new furniture and hardware.
- Prepared Assembling Instruction drawing from boring plan.
- Prepared and drafted the assembling guide and production drawing for packaging.
- Determined carton box estimation calculation and confirmation.
- Tested new samples for quality and functionality.
- Setting up showroom for customer visit.
- Determined volume and weight calculation for new samples.
- Developed boring plan and drilling mold drawing from hand sketch drawing by product manager.

**Achievement:**

- Conserved drill bit consumption by introducing new type of water coolant for drilling machine and new controlled drilling method, indirectly reducing cost and time.
- Participated in Malaysia Furniture Fair & Exhibition (MIFF) at PWTC, KL.

## Affiliations

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- Registered as Graduate Engineer (Reg.No.110614A) with Board of Engineers Malaysia (BEM)
- Membership in Universiti Teknologi Malaysia (UTM) Alumni and Perpustakaan Sultanah Zanariah UTM.

## Academic Qualification

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<b>Universiti Teknologi Malaysia, Kuala Lumpur</b> Bachelor in Engineering (Mechanical) Hons. Second Upper Class; CGPA : 3.06	<b>Jan 2011 – Nov 2015</b>
<b>Universiti Teknologi Malaysia, Kuala Lumpur</b> Diploma in Mechanical Engineering Second Upper Class; CGPA : 3.36	<b>Jan 2006 – Dec 2010</b>
<b>Universiti Teknologi Malaysia, Kuala Lumpur</b> <b>Autodesk Advanced Design &amp; Visualization Training Centre</b> Autodesk Professional Certificate for AutoCAD® application Discreet Certificate in 3D Studio MAX® Fundamentals	<b>Jan 2002 – Apr 2003</b>
<b>Sekolah Menengah Tengku Ampuan Rahimah, Klang</b> Sijil Pelajaran Malaysia (SPM) – Equivalent to GCE O-Levels Grade 1 with Distinctions in Mathematics, History, Additional Mathematics and English.	<b>Jan 1996 – Dec 2000</b>
<b>Sekolah Rendah Kebangsaan Methodist, Port Klang</b> Ujian Penilaian Sekolah Rendah (UPSR) Scored 4A's	<b>Jan 1990 – Dec 1995</b>

## Language

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- **Written** – Malay, English
- **Spoken** – Malay, English, Tamil

## Computer Proficiency

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- **Operating System** – Windows Vista, Windows 10, Macintosh
- **Software** – Autodesk AutoCAD, Inventor 3D, Solidworks Premium, Draftsight, Adobe Photoshop CS3, 3D Studio Max, LS-Prepost, LS-Dyna, ANSYS Gambit, ANSYS Fluent, Microsoft Office, Microsoft Project, Lotus Notes, SAP
- **Programming** – Turbo C++, Fortran 99, MATLAB 8.5

## Trainings Attended

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- Solidworks Advance Modelling
- Autodesk Autocad Upgrade training
- In-house management training
- In-house SAP system training
- Telephone Etiquette training

## Summary of Experience & Competencies

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- Total of seven years of working experience in furniture industry has improved designing skills and competency in drafting skills especially in AutoCAD® application.
- Six years of working experience in engineering field has gained technical sharpness, analytical decision-making and proven calculation based selections.
- Every job under my supervision is carefully done with a sense of professionalism and integrity to achieve the objective set.

- Highly responsible and committed to deliver a quality job promised on time.
- Always willing to learn from all level of people and looking forward to work with them in a team to produce a faster result.
- Able to be a team leader in accordance with systematic and highly organized work plan which shall deliver expected results.
- Fearless in meeting and engaging top management level personalities with respect, professional and friendly manner.
- Never compromise on discipline issues, strictly comply to organization's regulation and lead by example.
- Desire a career growth based on performance merit and accomplishments.

## Strength

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- Ability to solve problems by using a lateral thinking approach coupled with strong analytical and evaluative skill
- Hardworking and committed to assigned task
- Friendly and able to work in a team or independently
- Curious and inquisitive mind
- Always willing to learn and able to lead others
- Good leadership qualities and influential personality with team spirit
- Good communication and interpersonal skills

## Management Style

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- Democratic style which allows the employees to take part in decision-making
- Maintain a systematic and organized work schedule
- Follows organization procedures and protocol in every job execution
- Ability to keep incident report and advise to management on safety risk



## Objective for Exploring New Opportunity

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- To upgrade as a certified Professional Engineer (PE) under BEM supervision
- To learn and explore new field of engineering
- To earn better salary and improve living standard

## Current Remuneration

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- **Basic Gross Salary : RM4326.00**
- Contractual Bonus : One Month
- Performance Bonus : One – Two Months
- Transport Allowance : RM0.75/km for Business trip
- Other benefits : Medical coverage, Insurance, Dental, Sports Club
- **Expected Salary : RM6500.00**
- **Availability : One month notice**

## Reference

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### **Dr. Zaini Ahmad, CEng MIMechEng**

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