

# ***BIOGRAPHY***



**Nithin Manivannan (BSME, MIE)**  
Associate Engineer, Munro & Associates, Inc.

Nithin joined Munro & Associates at the beginning of June 2016 upon graduating with a Master's in Industrial Engineering from the University of Houston, Houston, Texas.

At Munro, he participated in the FFQ (Fit, Finish, and Quality) audit of the Toyota Mirai Fuel cell car. He also has gone through training in the company's proprietary software Design Profit and costing for plastic and metal parts that were used in Air-conditioning units and BMW i3.

Nithin earned his graduate degree in May 2016. His specialization was in Manufacturing and Operations Research and his curriculum included Design of Experiments, Engineering Economic Analysis, Design & Prototyping and Lean Production Systems. Several of his projects were, Job Shop Lean for High Mix Low Volume Machine Shop where he modified the layout for Hardy Machines Inc. using historical data and lean tools to improve the sequencing of parts and reduce wastes, and an academic project where he determined the manufacturing complexity and optimized the Jeep axle assembly line using SIMIO software to simulate the assembly line to analyze cost of production and improve manufacturability. Apart from academics he worked as a part-time intramural soccer official for 2 years at the University of Houston Campus recreation center.

As a Mechanical engineer, he started his full-time job in September 2011 as a vehicle validation and benchmarking engineer for Ashok Leyland Ltd, the second largest commercial vehicle manufacturer in India. He has benchmarked Ashok Leyland's heavy duty trucks with Scania, Volvo, and Daimler, measuring the physical properties of parts and components between aggregates and analyzed their packaging using CATIA. He also performed VA/VE, cost analysis and DFMEA for bus body and aggregate packaging for existing products and APQP for the new models. Before joining the benchmarking and testing team, Nithin was trained in manufacturing at the company's production facilities. In August 2014 he left Ashok Leyland to pursue his graduate degree in the US.

Nithin began his engineering experience through academics and projects at Coimbatore Institute of Technology, Coimbatore, India in June 2007, and he obtained his bachelor of science in Mechanical Engineering in May 2011 with a focus in Manufacturing, Design of Machines and Automobiles.

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