

# Adithyan Kannaiyan

10.04.1997 | Coimbatore, India

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## Education

2018 – ...    ■ **Master in Mechanical Engineering, École polytechnique fédérale de Lausanne, Switzerland.** *'Thermal Sciences' specialization.*  
GPA: 5.16/6.00

2014 – 2018    ■ **B. Tech. Mechanical Engineering, Indian Institute of Technology, Indore, India.** *Institute Silver Medal for academic performance.*  
GPA: 9.24/10.0

## Project Experience

Feb – June, 2019    ■ **Integration of a ground source heat pump model in a building energy system design tool**

*Semester Project, IPESE | Supervisors: Prof. Francois Marechal, Dr. Paul Stadler*

Developed an AMPL model for a ground source heat pump (GSHP) and integrated the model in an existing Mixed Integer Linear Programming (MILP) based design tool that optimizes a building energy system given target parameters.

July – Dec, 2017    ■ **Performance analysis of a thermochemical energy storage device for solar thermal applications**

*Bachelor's Thesis, Indian Institute of Technology, Indore, India | Supervisor: Dr. Anil Kumar, IIT Tirupati*

Designed an energy storage device utilising manganese chloride and ammonia as the working pair and characterised its performance under laboratory controlled conditions.

May – July, 2017    ■ **Shape Memory Alloy and Polymer composites for enhanced stiffness**

*Nanyang Technological University, Singapore | Supervisor: Dr. Huang Wei Min*

Fabricated and tested composites of shape memory alloy (Ni-Ti) and shape memory polymers (EVA, PMMA) for strength over a range of temperatures.

## Skills

Programming    ■ MATLAB, Python, R, AMPL

Misc.    ■ L<sup>A</sup>T<sub>E</sub>X, RMarkdown

Relevant coursework    ■ Renewable energy, Engines and fuel cells, Advanced energetics, Modelling and optimization of energy systems

Language competencies    ■ Strong proficiencies in English and Tamil, fluent Hindi, conversational French (DELF A2 level)

## Awards

2018    ■ **Institute Silver Medal, Indian Institute of Technology, Indore,** awarded for graduating at the top of the Class of 2018, Department of Mechanical Engineering.

2017    ■ Selected for the **NTU-India Connect Research Internship Scholarship Programme.**