

Shivananth Ilayanambi

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OBJECTIVE

I am an eager junior willing to learn by successfully landing a research opportunity within the industrial engineering sector. I am a very quick learner who will grasp difficult concepts quite easily while also taking the time and effort to put forth my best work into whatever I do.

EDUCATION

Pennsylvania State University, State College, PA

B.S. in Industrial Engineering

May 2025

GPA: 3.45

Relevant Coursework:

- Data Structures and Algorithms; Fundamentals of Computer Science; Physics: Mechanics, Electricity and Magnetism; Engineering Economics; Probabilistic Models in IE; Intro to Work Design; Deterministic Models in Operations Research; Statistical Methods in IE; Product Design, Specification and Measurement; Engineering Analytics; Stochastic Models in Operation Research; Service Systems Engineering
- Linear Algebra, Ordinary Differential Equations, Differential and Integral Calculus, Multivariable Calculus

Garnet Valley High School, Glen Mills, PA

High School Diploma

June 2021

GPA: 4.05

- AP Scholar with Honor Award Recipient
- Member of National Honor Society

RESEARCH

FPGA Based Crowd Management System

June 2022-December 2022

Anna University

Chennai, India

- Worked with Professor Seetharaman to create an FPGA circuit that would later be converted to an ASIC once all testing was completed
- Used the Xilinx Vivado platform to code the circuit
- Links: [Research Paper](#) , [Complete Report](#)

Scheduling Strategies in Manufacturing and Services

Aug 2023-December 2023

Pennsylvania State University

State College, Pennsylvania

- Review popular scheduling strategies in the manufacturing and service industries
- Work with scheduling applications using tools such as CPLEX and PuLP to implement solutions
- Use these programs to gauge speed and accuracy of heuristic approaches for scheduling
- Implement everything learned in a real world example dealing with issues Penn State may be facing with classroom scheduling
- Create a final report summarizing everything learned and all the work completed

TECHNICAL SKILLS

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|--------------|----------------------------|---------------|
| - SolidWorks | - Digital Design | - NI LabVIEW |
| - Java | - Adobe Photoshop/Premiere | - NI Multisim |
| - Python | - MATLAB | - PuLP |