

Nikesh Shrestha

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Summary: Mechanical Engineering major attending University of Maryland. Awarded multiple awards for excellence in education. Learned various skills through self-education and experience in various projects and involvement in multiple organizations. Excellent in interpersonal communication, working in a team and working individually. Well-organized, great at time-management and great presentation skills.

Education:

University of Maryland, College Park	Mechanical Engineering (GPA: 3.6/4.0)	(August 2018 – Present)
Calvert Hall College High School	High School Diploma (GPA 4.0/4.0)	(August 2014 – June 2018)

Skills:

- Programming: C++, MATLAB, HTML, Python, JAVA
- Software: SolidWorks, Autodesk Inventor, Microsoft Office
- Languages: English, Nepali, French, Hindi
- Soft skills: Critical Thinking, Communication, Teamwork, Leadership, Work Ethic

Teaching Experience:

Undergraduate Teaching Assistant for C++ & MATLAB Programming course (University of Maryland)

- Lead Studio sessions: reviewed concepts from lecture; helped students with “in-class” projects (Fall 2020)
- Graded Homework Assignments and Studio projects
- Helped students understand lecture material and apply them to homework assignments during office hours.

Undergraduate Teaching Assistant for Vibrations, Controls and Optimization I (University of Maryland)

- Helped students with homework assignments during office hours. (Spring 2021)
- Graded Homework Assignments

Projects:

Project: Redesign a Power Drill (Fall 2020)

- Understanding all the functional and physical components of a DCD701 Power Drill.
- Identifying areas that can be improved and engineering changes in that area.
- Improved thermal management of the drill at the most used orientation of the drill (reverse airflow).
- Team Scribe; Team Leader while exploring the transmission and electrical component of the drill.
- Improved teamwork, collaboration, presentation, time management, organization skills and attention to detail.
- Used MATLAB, AutoCAD, Excel for bi-weekly reports.

Project: Material selection for a Commercial Jet Engine Turbine Blade (Fall 2020)

- Understanding the current state of the art material used for turbine blades.
- Selecting an alternative material which can replace the current state of the art material.
- Improved research and self-learning skills.
- Improved teamwork, collaboration, and organization skills.

Project: Design a Rankine Cycle Power Plant (Fall 2020)

- In class competition to design the most efficient power plant within the given constraints.
- Constraints: Budget, Maximum heat and work output, Minimum value for certain properties.
- Learned the importance of “Trial and Error” method of problem solving.

Project: Design and build a fully functioning Over Sand Vehicle. (Spring 2019)

- Design and Build an OSV which lifts a three-pronged object and identifies its magnetic property.
- Team Scribe; Team Leader for Design team; Team member for Build Team.
- Gained experience using Autodesk Inventor, and programming language for Romeo V2 Board.
- Used Inventor to design the skeletal structure of the vehicle.

Project: Design and build the most efficient truss support. (Fall 2019)

- Design and Build a Truss Structure which can support the highest load.
- Learned the importance of planning and calculations necessary in a project.
- Created a computer aided design of the truss with animation at failure.

Project: Design a skeletal structure of a toy helicopter using CAD.

(Fall 2019)

- Replicate all parts of a fully functioning Toy Helicopter using CAD.
- Worked with other team members to design a Toy Helicopter using SolidWorks.
- Team Scribe: checked the status of progress and ensured everything was completed before the deadline.

Volunteer/ Work Experience:

Johns Hopkins Elder Plus (4940 Eastern Ave, Baltimore, MD 21224),

(June 2017 – September 2017)

- Recreational Activities Assistant

Cultural Academy for Excellence (2705 Queens Chapel Rd, Mt Rainier, MD 20712),

(January 2019 – May 2019)

- Tutoring elementary school kids attending Prince George County Public School

Wings Things N More (3007 E Joppa Road, Parkville MD, 21234)

(June 2015 – Present)

- Closing Assistant Manager and Cashier

Amazon Warehouse (5300 Nottingham Dr, Nottingham, MD 21236)

(December 2019 – Present)

- Warehouse Team Member in Sort Center

Flynn O'Hara Uniforms (8868 Waltham Woods Rd, Parkville, MD 21234)

(June 2018 – August 2019)

- Main Embroiderer and Cashier

Awards:

- Dean's List for Outstanding Students (Fall 2018, Spring 2019)
- Office of Multi-ethnic Student Education Academic Excellence Award (Fall 2018, Spring 2019)
- Lushbaugh Endowed Scholarship Award Recipient (Fall 2019, Spring 2020)
- Adele H. Stamp Memorial Award (Fall 2018, Spring 2019)
- AP Scholar with Distinction (June 2018)

Clubs and Organizations:

- AMSE (American Society of Mechanical Engineers)
- Math Club
- Robotics Club (VEX Robotics Competition)
- NSA (Nepalese Student Association)
- NSAF (Nepalese Student Association Football Club)
- CEC United (Local Baltimore Soccer Club)