

Career Objective

Passionate, adaptable and goal-oriented college student working towards a [3-2 dual degree](#) engineering program. Aiming to use knowledge of physics, pre-engineering, and computer science in a STEM related internship.

Education

Bachelor of Science (Physics) – Knox College, Galesburg, IL

- Current GPA:3.63/4.0 (Dean's List for Fall 2016, Winter 2018)

Expected Graduation:

June 2019

Internship Experience

Summer Internship in [Karkhana](#) (Kathmandu, Nepal 2017)

- Teacher's Aide for a class of 12 to 20 students for an educational company with a unique approach to increasing STEM learning for children.
- Created class content in a "maker space" and used various tools such as laser cutter, soldering iron, and electric drills.
- Attended the MIT's "Internet Of Things" workshop for six weeks and made an interconnected embedded system.
- Assisted in content building, planning, and organizing 12 week classes for 8 to 15 y/o children.
- Advertised weekly classes to parents and schools via Phone Calls, Texts, etc.

Leadership Experience

[Engineering Club](#), Est. 2016, [President](#) (2018 - Present) & [Public Relations Chair](#) (2016-2018)

- Macro-managing a team of public relations, secretary, historian, treasurer to maintain overall club oversight.
- Encouraging students to work on individual projects and cross-departmental collaboration in a maker space.
- Organizing the first "SMC-Down Showcase" providing students and STEM clubs an opportunity to showcase projects and research that they have worked on during the academic year.
- Organizing a campus-wide "Introduction to Arduino Projects" beginner's level class.
- Recruited 25 active members besides 6 founding members. (Public Relations)
- Fundraised to buy a lathe machine (estimated cost USD 6,000) via [Knox Starter](#) (Public Relations)

Technical Skills

- **AutoDesk Fusion 360**- Can apply advanced industry-level design-based workflows for conceptual design, sketching, solid modeling based on freeform, and surface modeling by rapid prototyping.
- **JAVA/C++/ Python**- Can apply intermediate object-oriented programming in Java with knowledge of recursion, ADTs and GUI. Basic level Python programming and C++ Arduino coding.
- **Excel and Mathematica**- Completed detailed lab reports with data analysis, uncertainty, and plots using instruments such as Oscilloscopes, Voltmeter, Grating spectrometer etc in topics such as X-ray fluorescence, photoelectric effect, standing waves, geometric optics, digital electronics, etc.

Projects Completed (Content Available Online)

[Internet of Things \(IoT\) Walking Stick](#)

- Created an "Internet of things" walking stick which has functionalities such as step-counter, date/time and voice-control with emergency assistance.
- Programmed Microcontrollers, OLED, IMU, WI-Fi-Module etc using C++/ Python to create a fully automated interconnected embedded system with a server-side and GPS.

[DIY 3D printer](#)

- Assembled and structured components of a 3D printer with a team of four members.
- Gained knowledge of the different components and functionalities of the 3D printer.

[Formula 1 car 3D CAD design](#)

- Learned 3D modeling skills by rapid prototyping a formula 1 car 2D sketch to a 3D model. Used parametric and freeform modeling to photo-realistically render and create a 3D model.

Employment History & Skills

Knox College Red Room [Math Tutor](#) (Subject Mastery)

Year: 2017-Present

Knox College Student [IT Lab Assistant](#) (Customer Service)

Year: 2017-Present

International and New student [Orientation Leader](#) (Global Perspective)

Year: 2017

Knox College Admissions [Tele-Ambassador](#) (Communication Skills)

Year: 2016-2017