

Sagar Garg

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Objective

An educational internship in the field of computer science and engineering.

Education

Academy of Engineering and Design Technology (AEDT)
Bergen Country Academies
• GPA: 3.62

2012-Current
Hackensack, NJ

Related Coursework

Introduction to Engineering Design I – Gained an understanding of Autodesk Inventor and basic HTML and CSS.
Digital Electronics – Gained an understanding of basic circuits including, resistors, diodes, transistors, and capacitors.
Engineering Technology – Learned the various components of a computer, and designed and built a Panasonic robot.
Intro to Robotics – Built various robots using Legos and gears, and built and programmed a Sumo Bot to travel in a maze.
Introduction to Engineering Design II – Refined Inventor skills by reverse engineering an electric drill.
Principles of Engineering – Gained an understanding of material science, designing bridges, pneumatics, and hydraulics.
Intermediate EE – Gained an understanding of current, passive/active components, and embedded control.
Manufacture Process CIM – Gained an understanding of AutoCAD, CNC, and various other engineering skills.
Intro to Java – First programming course, learning the basics of Java programming.
Intro to Python – Next programming language, developing the skills needed for Flask.
Android Application Development – Using Java skills to develop android apps.
AP Calculus BC – This course is a full-year rigorous introduction to the fundamentals of differential and integral calculus.
AP Chemistry – Gained a further understanding of various chemistry topics to prepare for the AP test.

Skills

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|--------------|----------------------|-----------------------|
| • HTML5 | • CAM | • Arduino |
| • CSS3 | • Autodesk Inventor | • Android Development |
| • Java | • AutoCAD | • 3D Printing |
| • Python | • Computer Numerical | • Soldering |
| • JavaScript | Control (CNC) | • SolidWorks |

Extracurricular Activities

USA Computing Olympiad (USACO) – A monthly algorithmic competition for high school students where students solve algorithmic based programming problems.	2013-Current
American Computer Science League (ACSL) – A national competition where programming tasks and computer science problems are solved.	2014-Current
South Asian Club (SAC) – SAC aims to raise funds for a charity while promoting cultural awareness at my school. Webmaster of South Asian Club.	2012-Current
Quiz Bowl – A fast-paced question-based competition where teams vs with each another to answer questions involving a wide-range of subjects.	2012-Current
HackBCA – Help organized HackBCA, first high school only hackathon.	2014-Current

Projects

LED Cube – Built a 4x4x4 LED cube that uses an Arduino Uno micro-controller to program the LEDs.
Maze Solver – Created at HackRU Spring, designed a maze generator and solver using Java.
Clean Sleep – Created at HackRU Fall, created a web application that ranks hotels based on how clean the room is, designed for users to search for hotels using google maps.
Textbook Trader – Created at YHack, created a web application that helps users sell college textbooks within the college.
Unit Conversion App – First android application that allows users to switch between multiple units.

Volunteer Service

Liberty Science Center – Had a variety of tasks including helping children and adults in exhibits, and being a pocket scientist; learning about STEM at the same time.	Summer 2013
Hackensack University Medical Center – Learned about the business of a hospital, and was about to talk to several doctors about their experience	Summer 2014