

# TANVIR SINGH

24060 Tottenham Court Novi, MI 48374

Tel: 248-982-6764 E-mail: [tanvirbhangu@gmail.com](mailto:tanvirbhangu@gmail.com)

---

## EDUCATION

**University of Michigan, Ann Arbor, MI**

anticipated April 2018

❖ B.S.E. in Computer Science

❖ GPA: 4.0

**Novi High School, Novi, MI**

(2014)

❖ GPA: 4.0, Top 6%, SAT Score: 2350, ACT Score: 35, PSAT Score: 233

❖ 200+ hours of volunteer work at Hidden Falls Gurdwara, school projects, etc.

---

## EXPERIENCE

**Courses at University of Michigan, Ann Arbor, MI**

(2014 - Present)

❖ Created a console-based Monopoly simulator using object-oriented principles

❖ Developed a simplified search algorithm that used cosine similarity and the tf-idf measure to find documents for a query

❖ Created a MATLAB function that given the matrix form of an image used various techniques to localize the image based on known data

**Michigan Aeronautical Science Association**

(2014 - Present)

❖ Designing and building an integrated flight computer system using the C language, an Arduino board and sensors to fit into a hybrid rocket for a competition

**IB Computer Science HL**

(2012-2014)

❖ Created a program(with GUI) in Java based on a self-thought concept to help teacher save hours of homework grading

❖ Learned Java for two years and the basics of computer hardware design

**Hemkunt International Speech Competition**

(2012)

❖ Helped coordinate the organization and execution of a 4 day event

❖ Created and compiled a 30 page programme using Microsoft Publisher

---

## SKILLS

**Foreign Language**

❖ Fluently speak Punjabi, Hindi and Urdu

❖ Proficient in French

**Programming**

❖ C++, Java, MATLAB, Verilog, Git/Github

---

## HONORS & AWARDS

**National Merit Finalist**

(2014)

**1<sup>st</sup> Place Hemkunt International Speech Competition**

(2014)

**National AP Scholar**

(2013)

---

## LEADERSHIP POSITIONS

**Science Olympiad**

Vice-President (2013-2014)

**French Club**

Publicity Officer (2012) & Vice President (2013-2014)

**Science Club**

Secretary (2013-2014)