## How to Learn: Humans vs. Computers

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#### Introduction

- Name: Navpreet Singh → Nav
- School: Massachusetts Institute of Technology (MIT) in Cambridge, MA
- Major: Artificial Intelligence and Decision Making (MIT Course 6-4)
- **Hometown:** New York City, New York
- **Hobbies:** Traveling, Racing, Chess, Baseball, American Football, Jazz



#### University in the US

- Most people in the US start their first year of university at age 18-19.
- A Bachelor's degree is a 4 year program, after which you graduate.
- Most colleges are private colleges, and most of their funding comes from endowments (donations).
  - MIT, Harvard, Yale, Princeton, Stanford, ...
- Some colleges are public colleges, and receive most of their funding from the government.
  - Georgia Tech, UCLA, UC Berkeley, University of Michigan, ...



### **University Admissions**

- Most American universities use a holistic admissions process, looking at various aspects of you as a student.
  - Scores, such as your SAT/ACT, IB/AP, school grades on your transcript, and sometimes TOEFL/IELTS (depends on school).
  - **Essays**, including your main admissions essay, along with supplemental (additional) essays, with prompts unique to each school.
  - Extracurricular activities, such academic/sports teams, clubs, jobs/internships, and research experience.
  - Recommendations, from your teachers and/or mentors.
  - o **Background**, such as your socioeconomic status and cultural heritage.

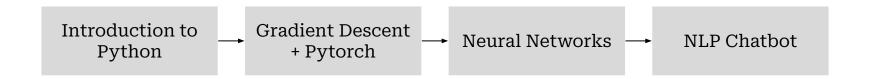
### **SAT/ACT Preparation**

- Most students take their SAT/ACT in their second to last year before university.
- Khan Academy has a free SAT preparation course which is very helpful to study for the exam (<u>Link</u>).
- The College Board has also released SAT practice tests, which are very helpful in determining your progress (<u>Link</u>).
- SAT YouTube courses: <u>Hayden Rhodea</u>, <u>The Organic Chemistry Tutor</u>, <u>Brilliant Prep Reading</u>, <u>Brilliant Prep Writing</u>
- ACT Sample Test Questions: <u>Math</u>, <u>English</u>, <u>Reading</u>, <u>Writing</u>, <u>Science</u>
- ACT YouTube courses: <u>here</u>.

# Questions?

#### **Course Preview**

- The goal of this course is to introduce the different ways humans and computers learn.
- In my lessons, you guys will be introduced to concepts in Artificial Intelligence (AI) and Machine Learning, such as Gradient Descent, Neural Networks, and Natural Language Processing (NLP).
- By the end of this course, you guys will have been exposed to these concepts and be given pathways to learn more on your own in the future.



# Introduction to Python

## https://tinyurl.com/JubileeGit