AddisCoder Lecture 1: Introduction

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Who am I?

- Professor of computer science at UIUC

- Research: machine learning + computer systems

- Taught for AddisCoder in 2016, 2018

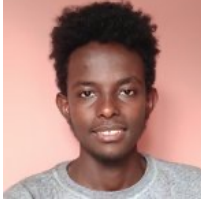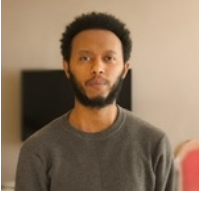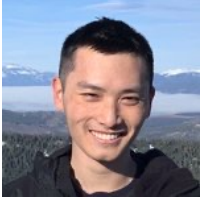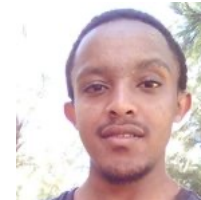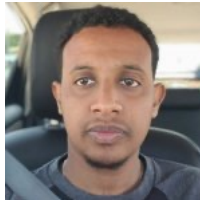# The rest of the team

Lecturers:

Alex Krentsel   Heather Huynh   Jelani Nelson

TAs:

Why computer science?

World largest company by market cap

	$0	$1,000,000	$2,000,000	

Apple — $2,292,521

Microsoft — $2,128,043

Alphabet — $1,694,081

Amazon — $1,659,924

Saudi Aramco — $1,282,847

Meta — $904,371

Tesla — $834,677

TSMC — $612,815

Tencent — $35...

NVIDIA — $3...
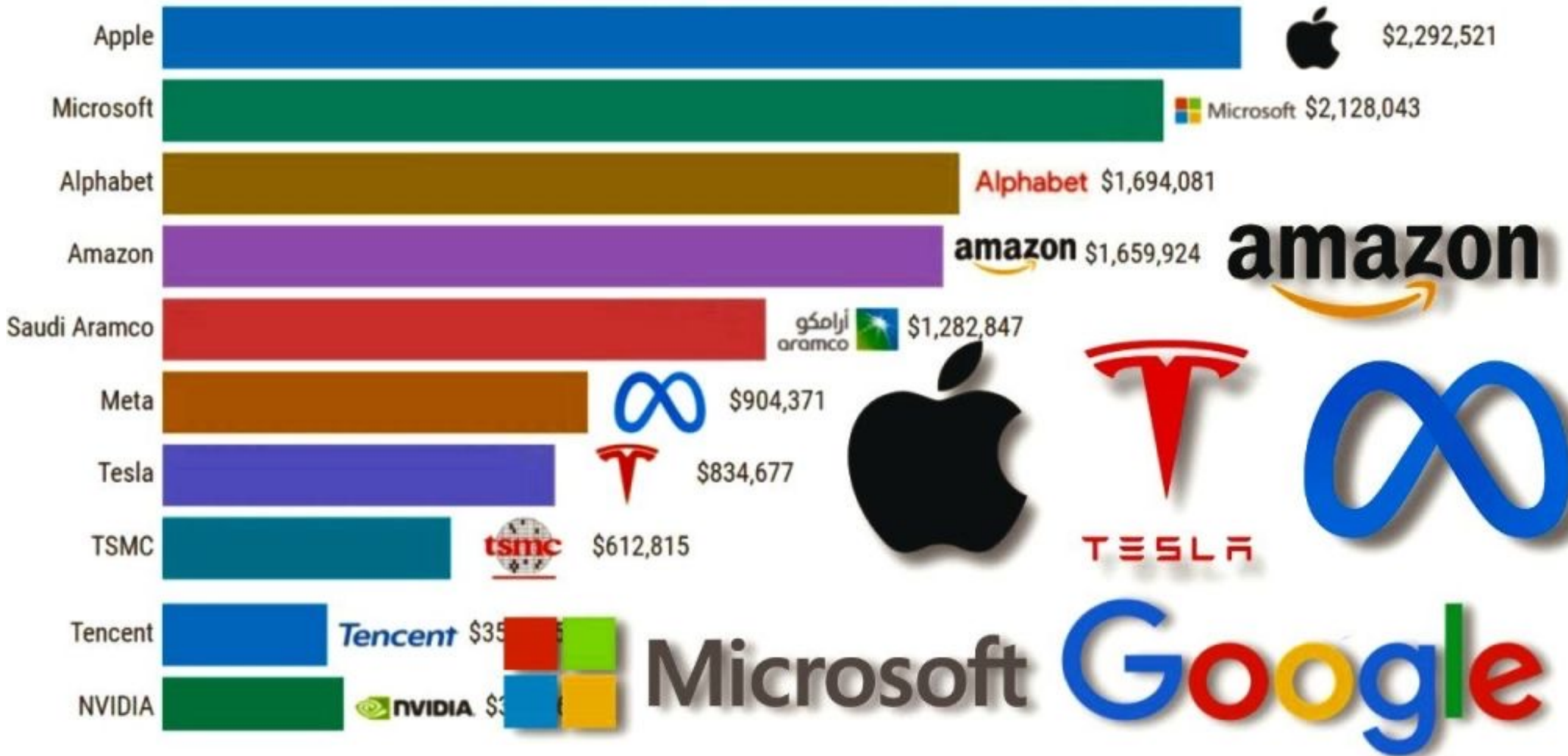
1,000,000 more jobs than students by 2020

$500 billion opportunity

1.4 million computing jobs

400,000 computer science students
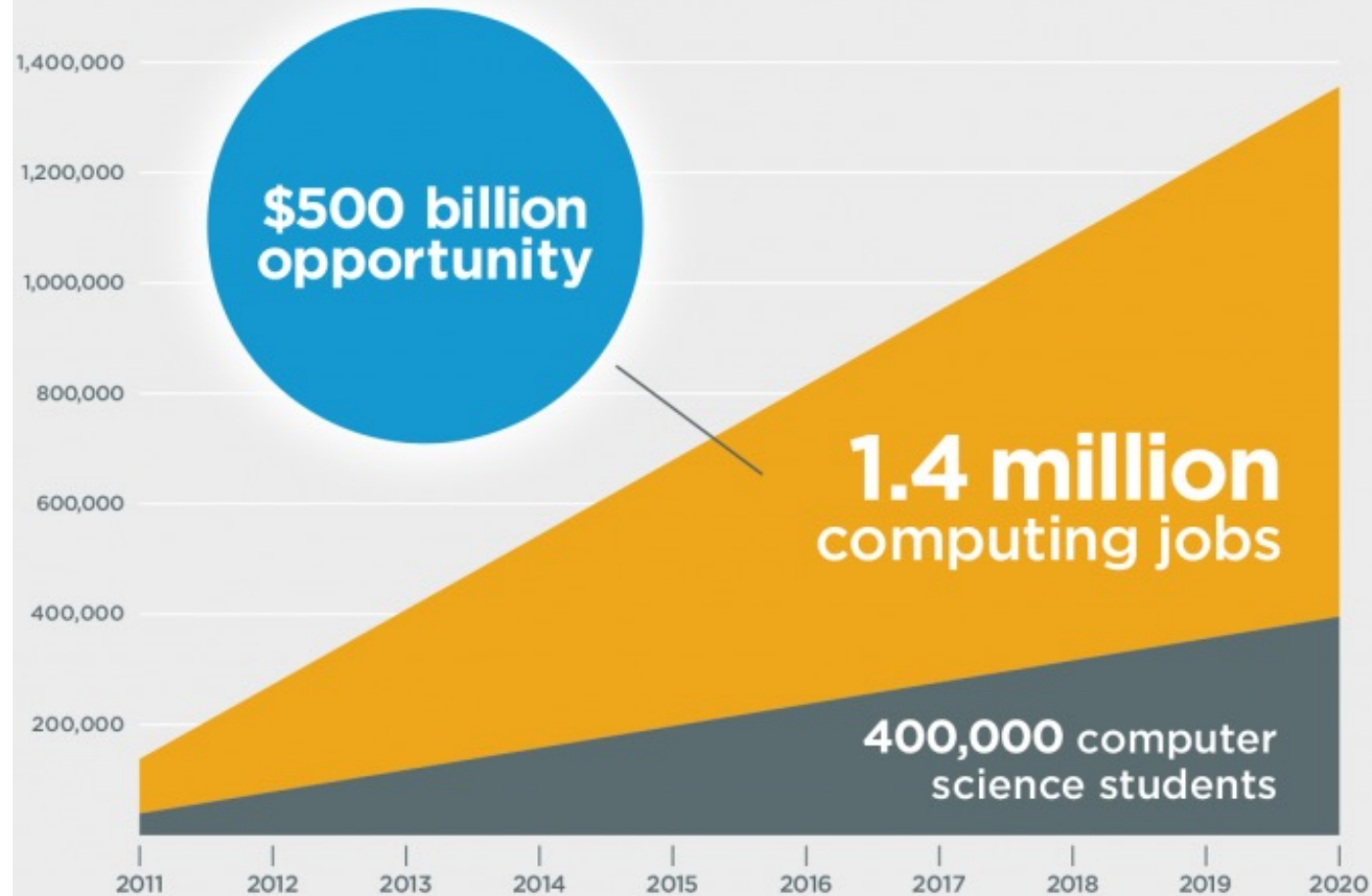
Computer science **is a top paying college degree** and computer programming **jobs are growing at 2X the national average.**

What will you learn in this class?

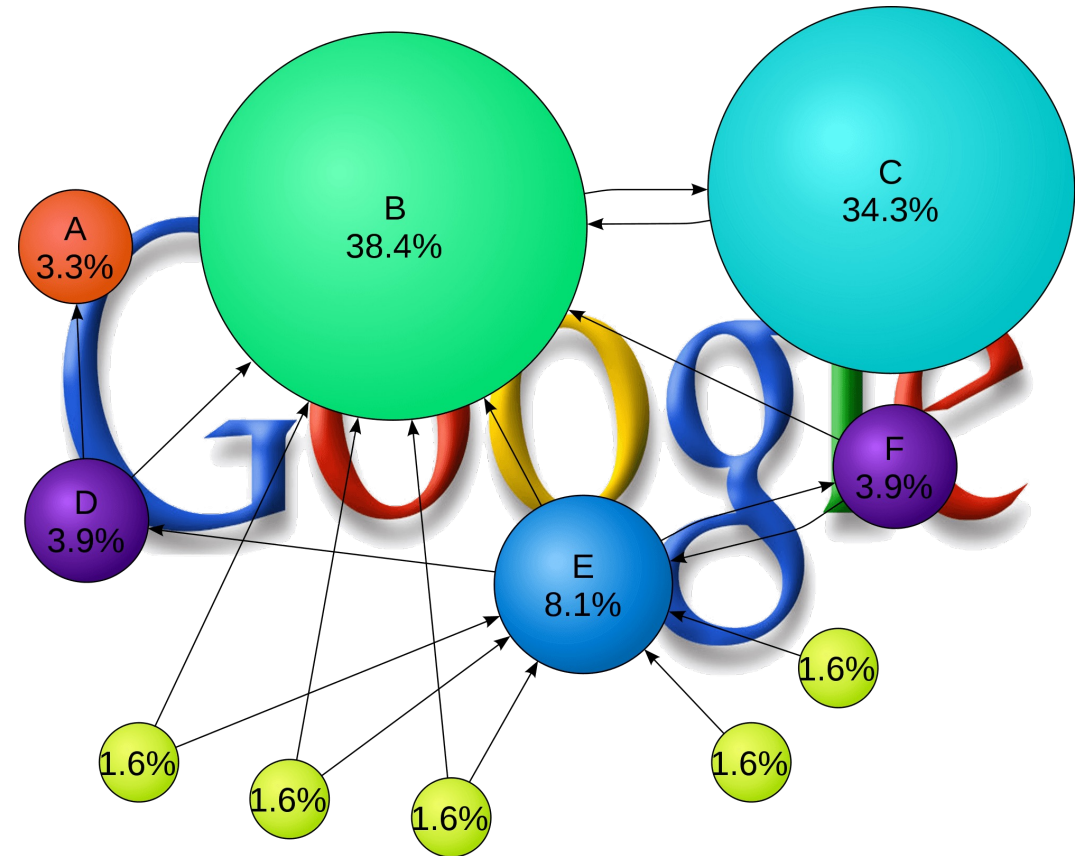- Basic programming in python™

- Algorithmic thinking and implementation

You will NOT learn

- App development

- HCI, ML, …

Why algorithms?

PageRank: foundation for Google

- Basis for Google search

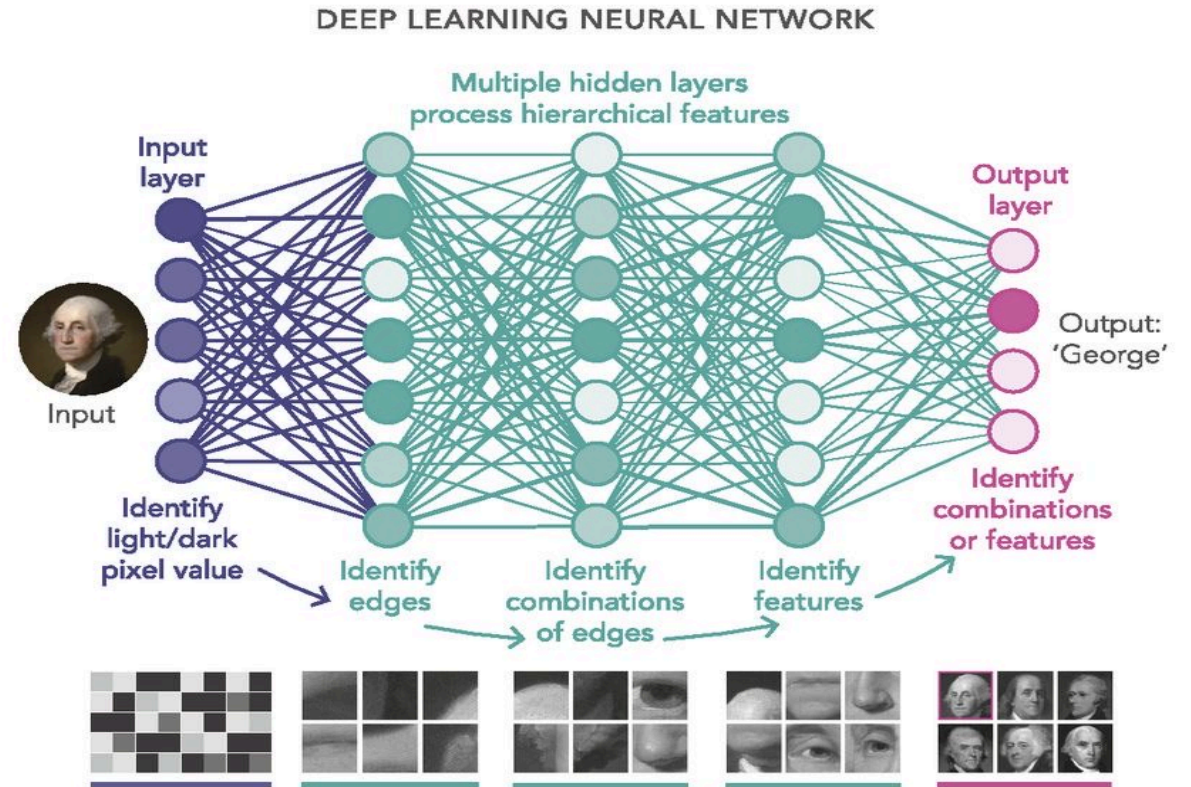- Quickly find links that are popular

Consistent hashing data structure

Streams 200 million movies simultaneously

Back propagation

Backbone of AI revolution

Let's hear from AddisCoder alumni

Let's start learning

Expectations for this course

- This course moves fast

- You will need to seriously engage with the material

- We are here to help!