

Software Engineering

Sean Schuchman

- Senior Software Engineer



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- Senior Software Engineer
- Bachelors Degree in Computer Engineering



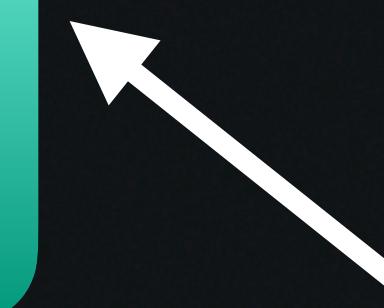
What is Software Engineering?

Software
Engineering

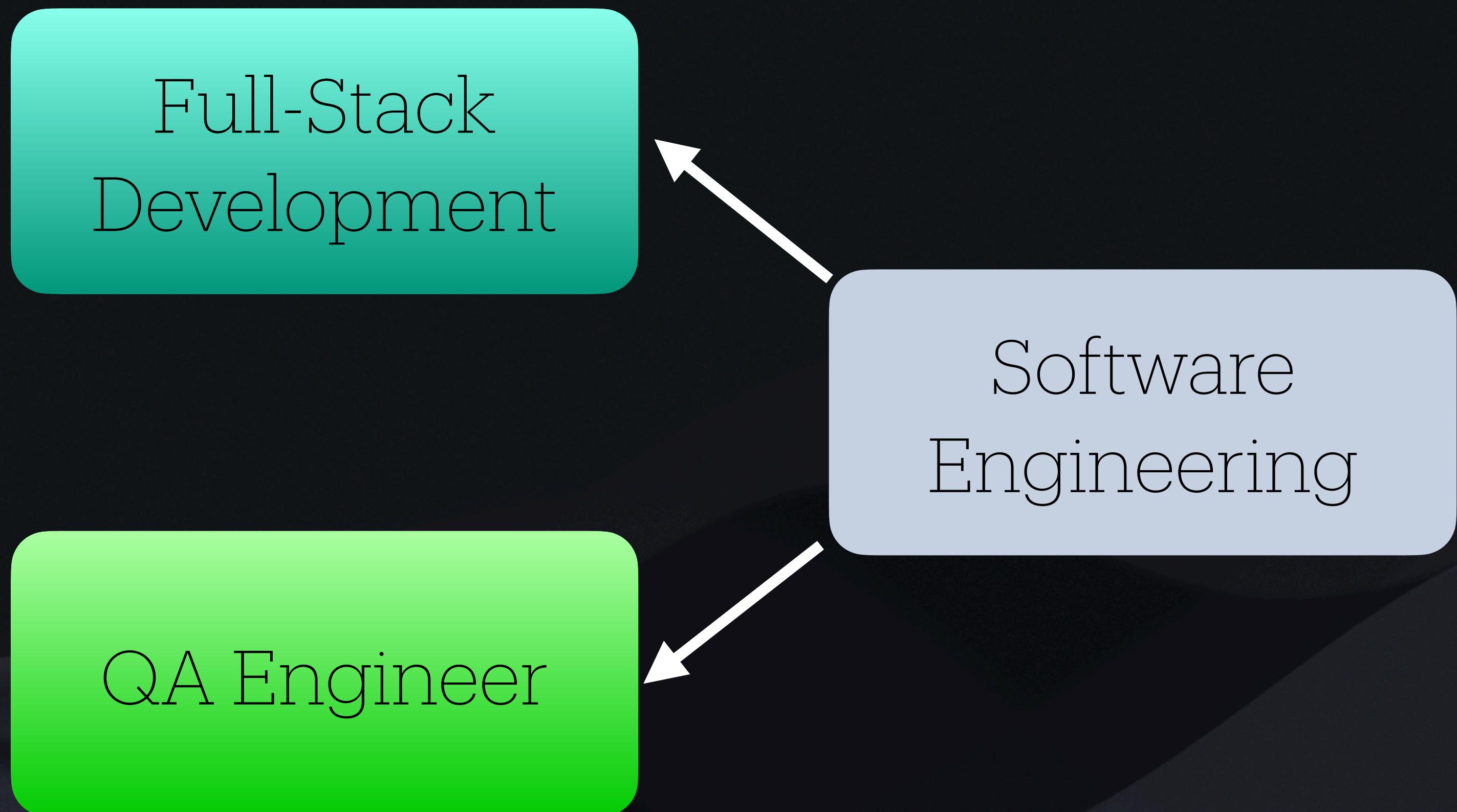
What is Software Engineering?

Full-Stack
Development

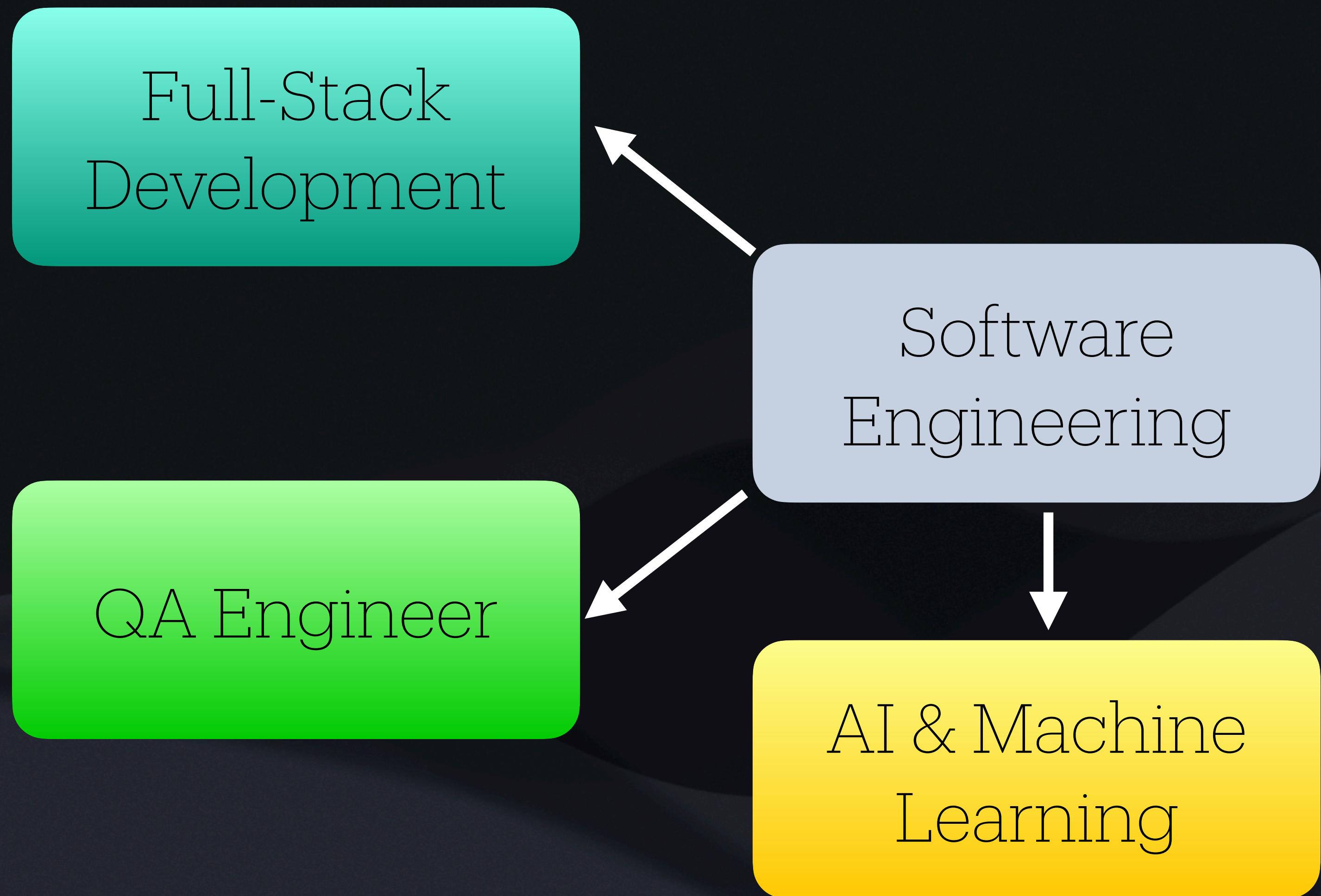
Software
Engineering



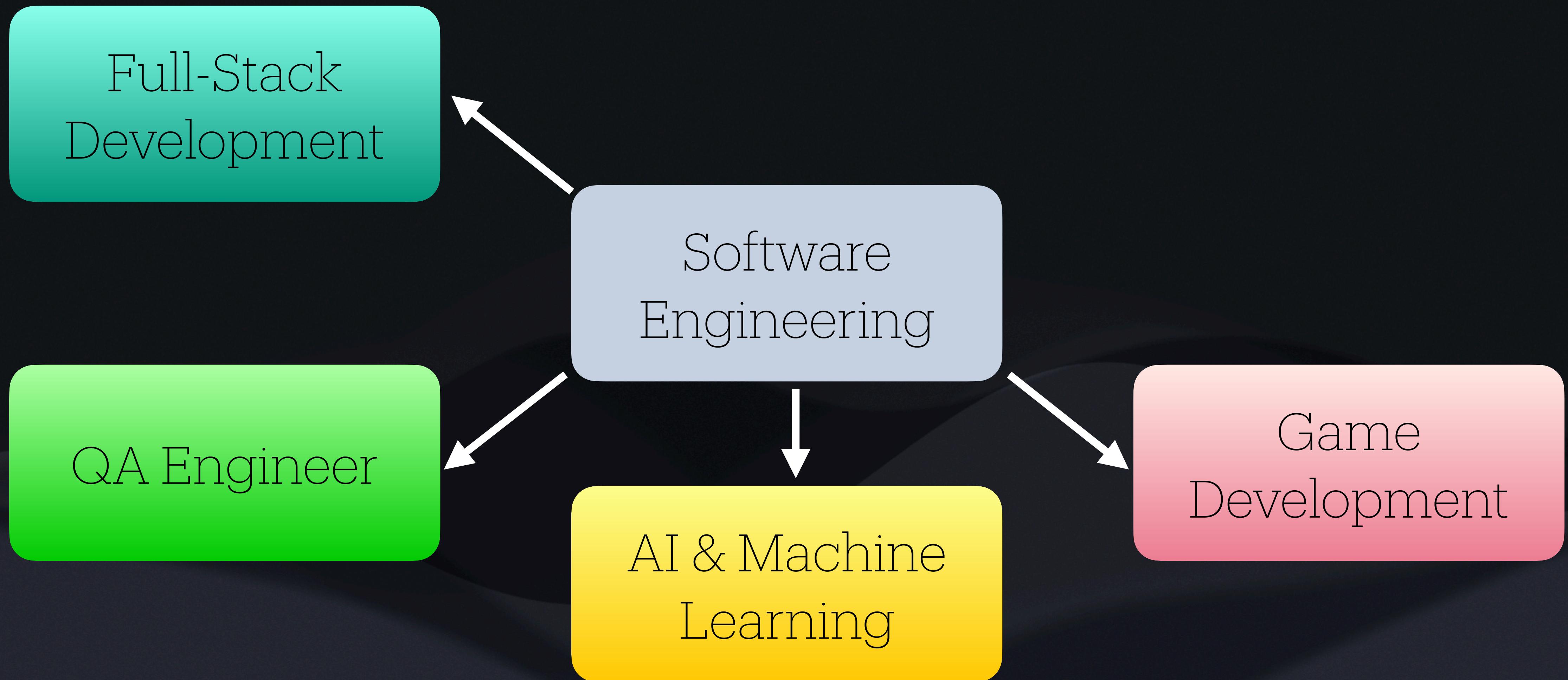
What is Software Engineering?



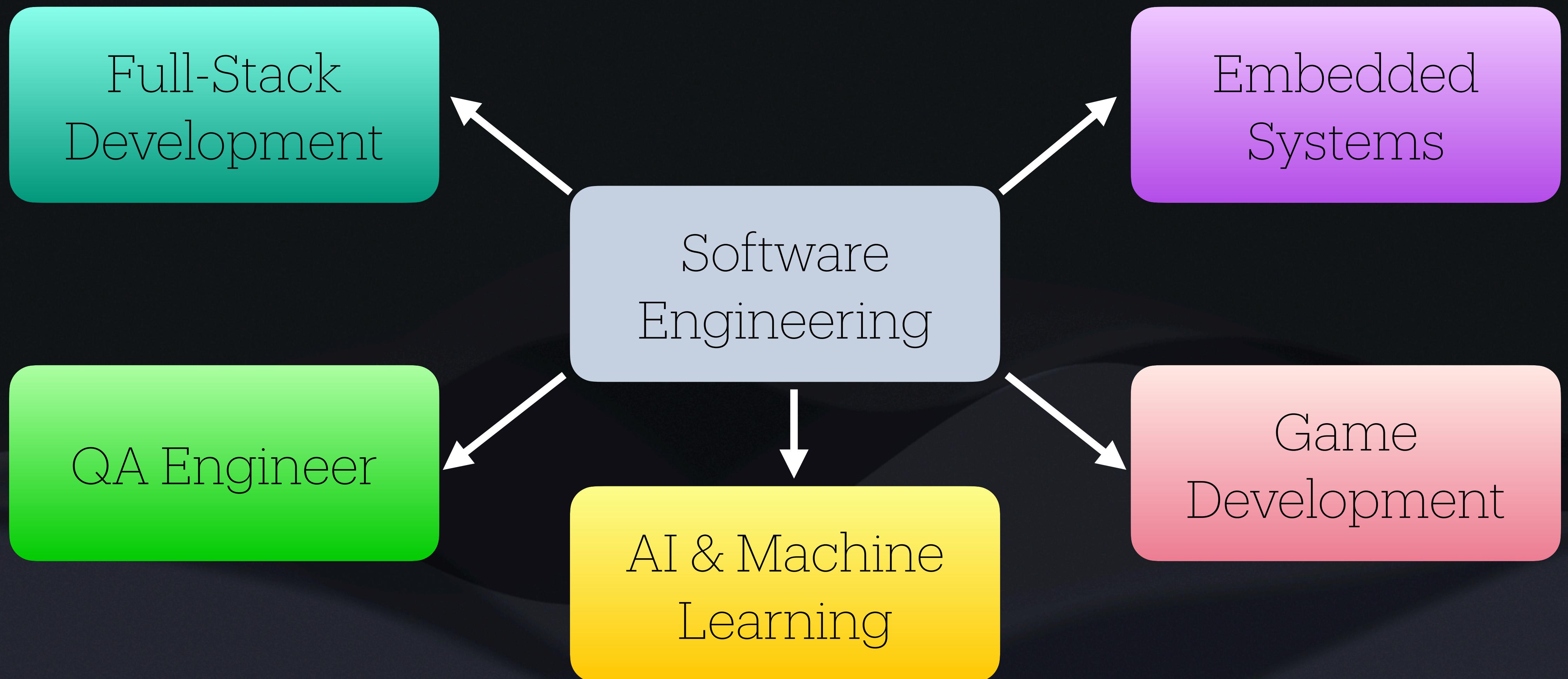
What is Software Engineering?



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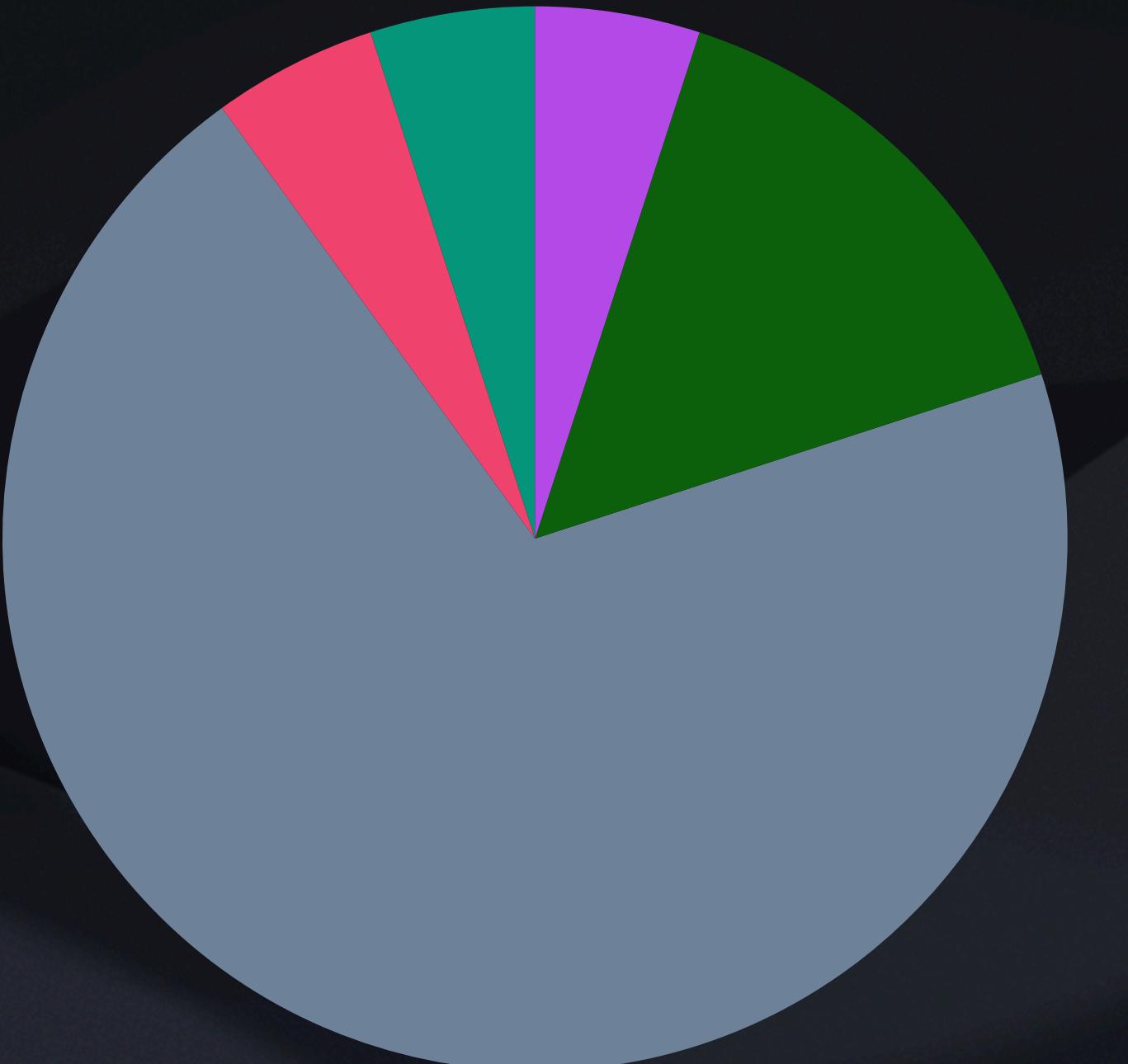


A Day in the Life



A Day in the Life

- Collaboration
- Documentation and Planning
- Coding Sessions
- Testing
- Learning



Education Path

Majors / Certifications

Software
Engineering

Education Path

Majors / Certifications

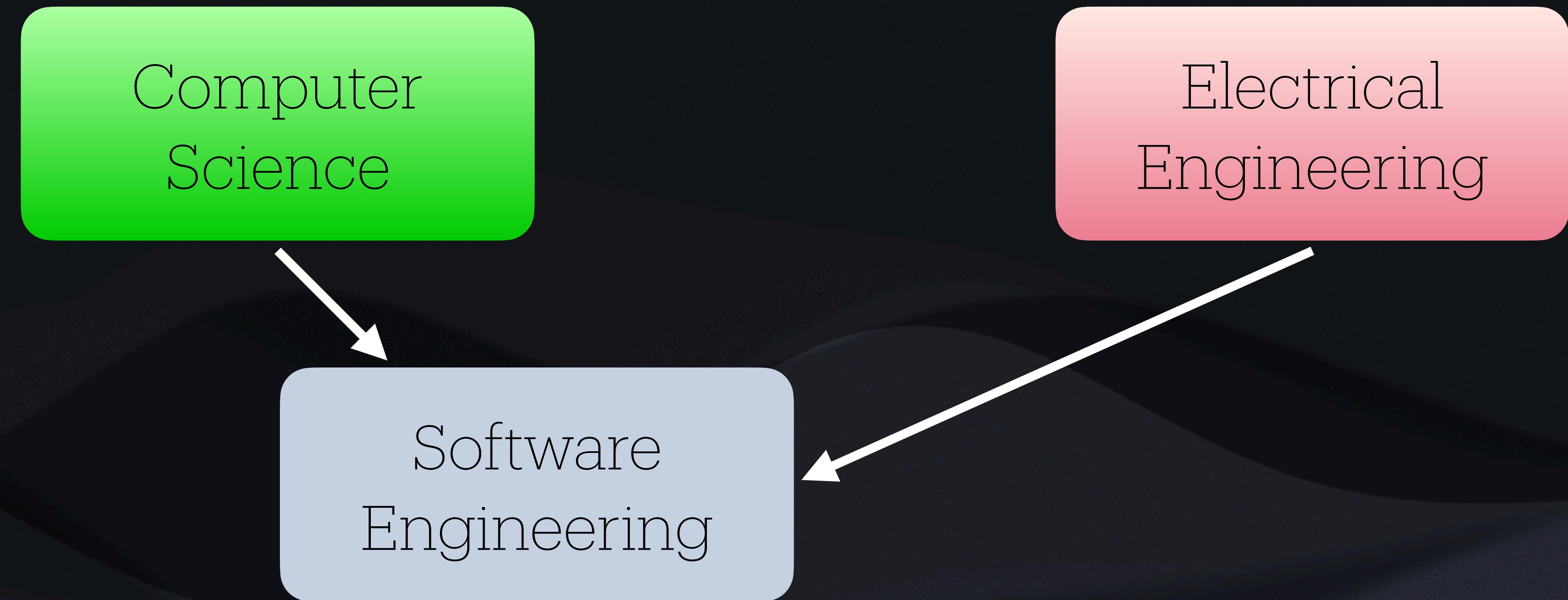
Computer
Science



Software
Engineering

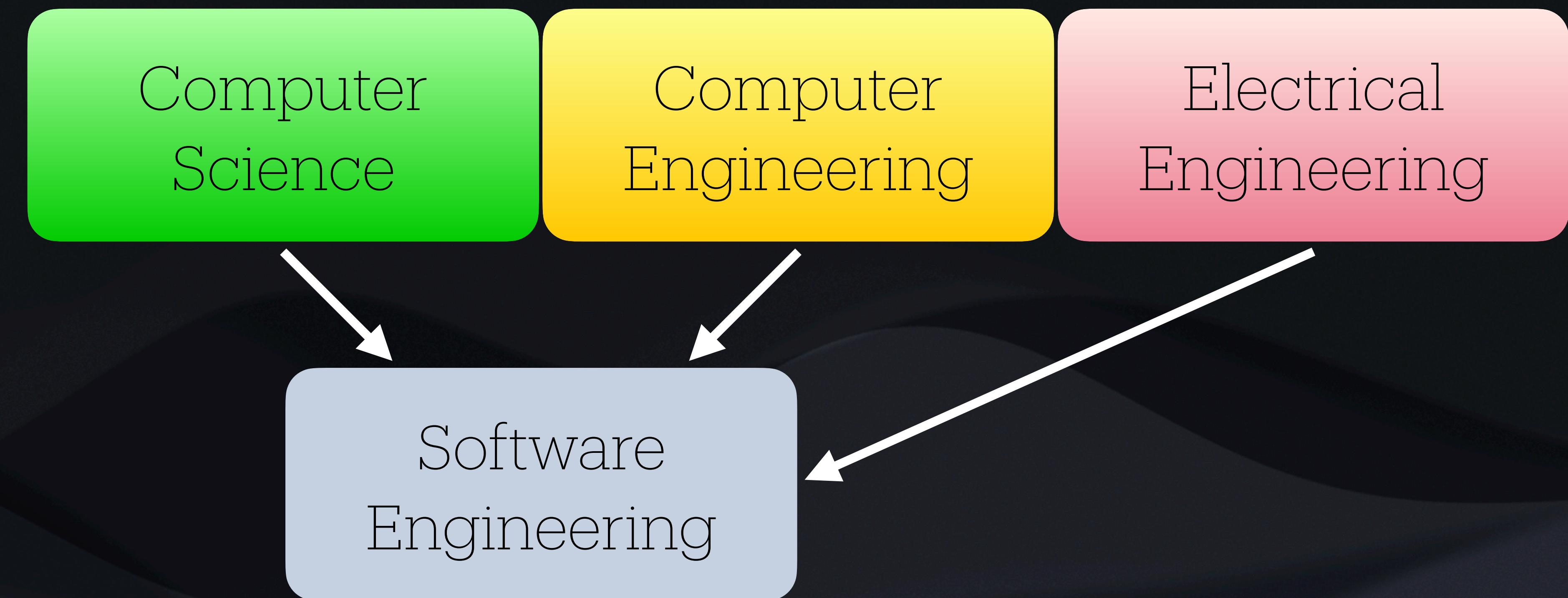
Education Path

Majors / Certifications



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Education Path

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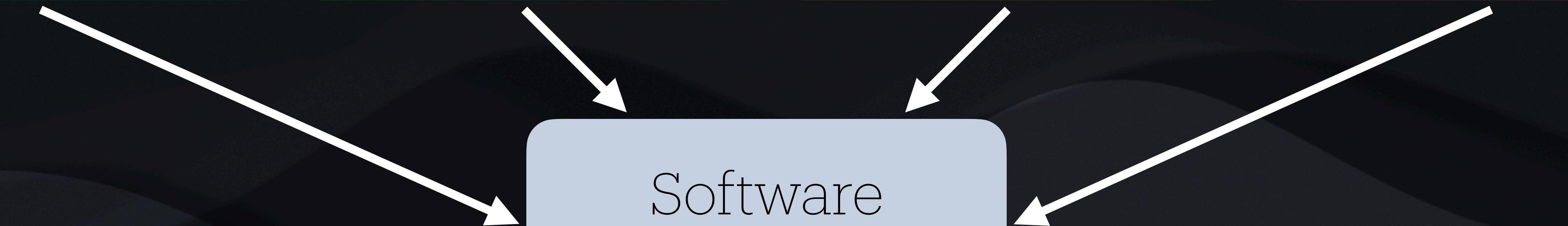
Coding
Bootcamp

Computer
Science

Computer
Engineering

Electrical
Engineering

Software
Engineering

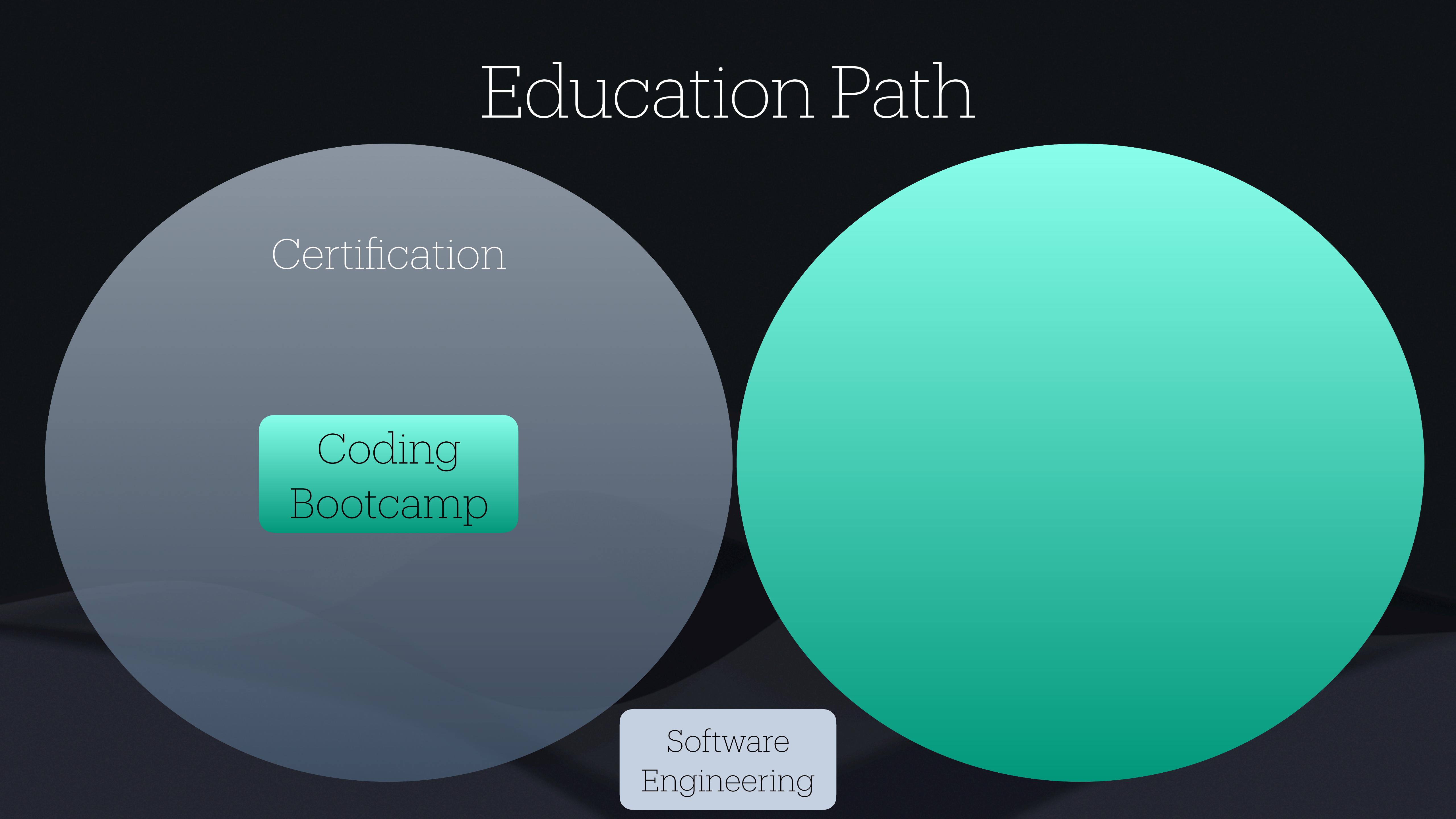


Education Path



Software
Engineering

Education Path



Certification

Coding
Bootcamp

Software
Engineering

Education Path

Pros:

- Quick entry into job
- Minimal cost
- Fair base salary

Certification

Coding
Bootcamp

Software
Engineering

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Certification

Coding
Bootcamp

Cons:

- Salary Ceiling
- Limited Career Growth
- Grunt-work

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Engineering

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Four Year Degree

Computer
Science

Electrical
Engineering

Computer
Engineering

Software
Engineering

Education Path

Pros:

- More marketable skills
- More opportunity for growth
- Greater autonomy

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Bootcamp

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Four-Year Degree

Computer
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Electrical
Engineering

Computer
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Software
Engineering

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Bootcamp

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Science

Electrical
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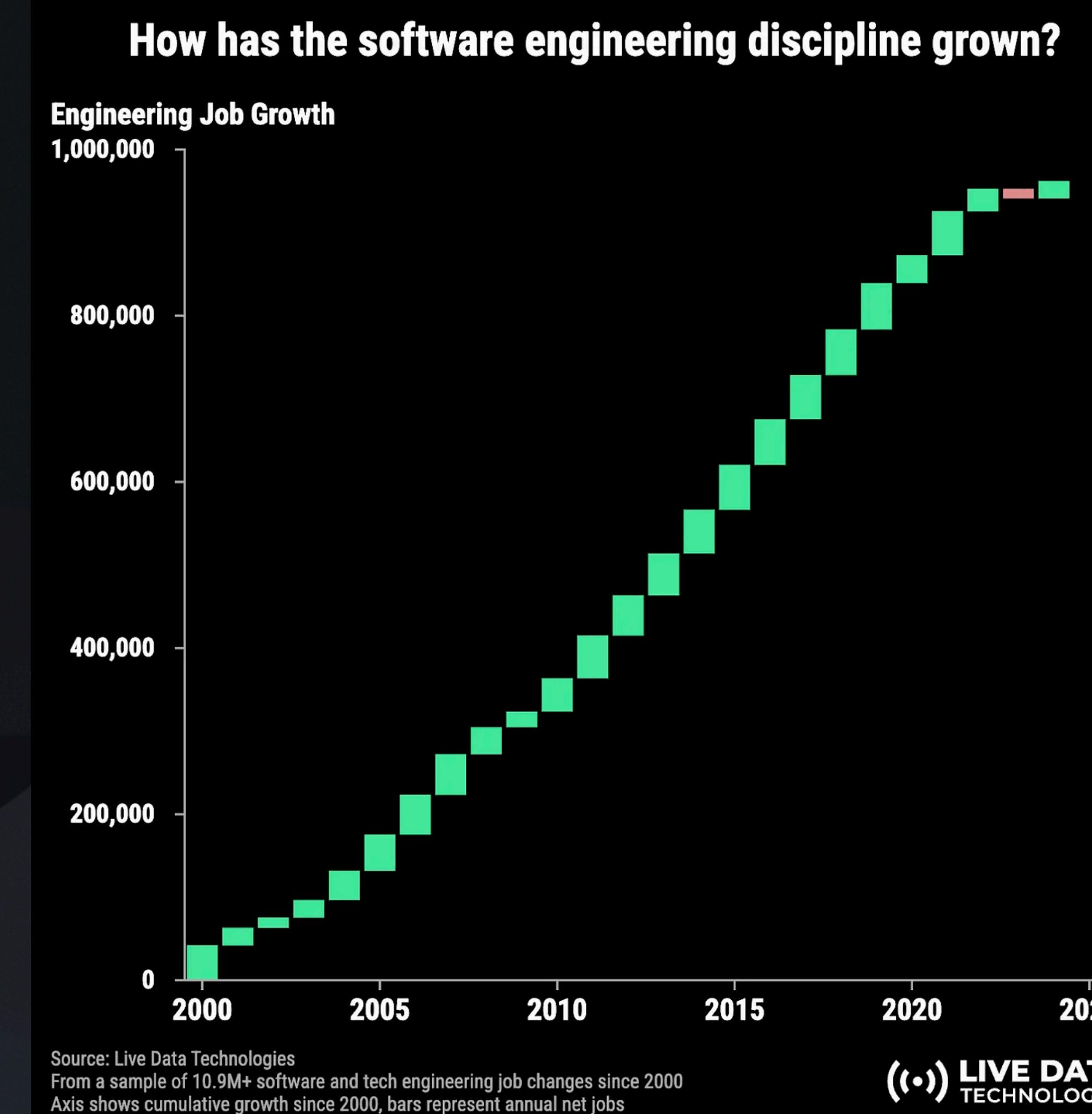
Software
Engineering

Cons:

- More difficult
- Timing consuming
- Tuition

Future of the Industry

- Projected growth of 17% from 2023-2033
- Paradigm shift in work demand
- Emphasis on skills and experience



Industry Hot-Takes

A biased opinion...

- Low-level coding jobs are in decline.
- Specialized and multi-disciplinary software jobs are in demand.
- Large competition in computer science majors.

Career Advice

1. Education

Receive a four-year degree if you can afford it.

Career Advice

1. Education

2. Be Curious

Learn as many different skills as possible.

Career Advice

1. Education

2. Be Curious

3. Don't Cut Corners

Avoid using AI when programming.

You learn the most when you struggle.

Career Advice

1. Education

2. Be Curious

3. Don't Cut Corners

4. Start Early

Start projects and document what you learned.

Get internships as early as possible!

Career Advice

1. Education

2. Be Curious

3. Don't Cut Corners

4. Start Early

5. Have Fun

Make it something you enjoy!

People can tell that you care about what you do by the quality of your work.

Career Advice

1. Education

2. Be Curious

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4. Start Early

5. Have Fun

Get Started!

Learn a
Language

Swift

Ruby

Python

Kotlin

C

C++

C#

Java

Go

Javascript

Find a Project

Make a
Website

Build an
App

Build a
Robot

Make a
Game

Get Started!

You want to

Build a Website

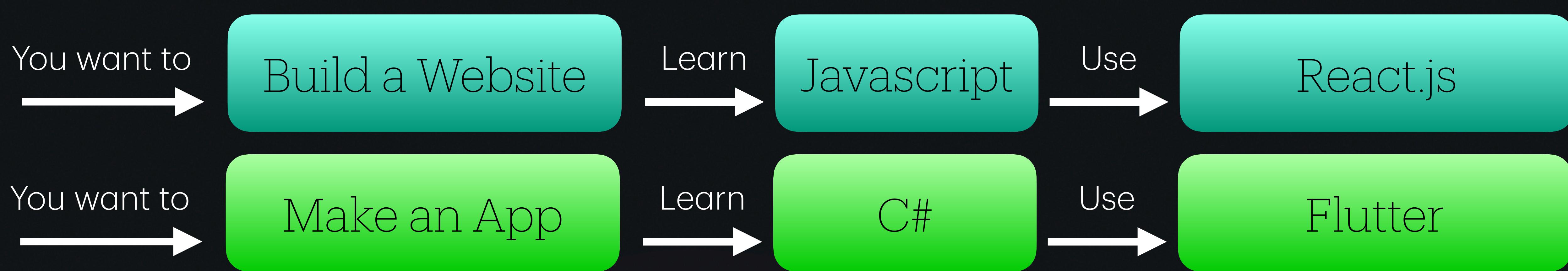
Learn

Javascript

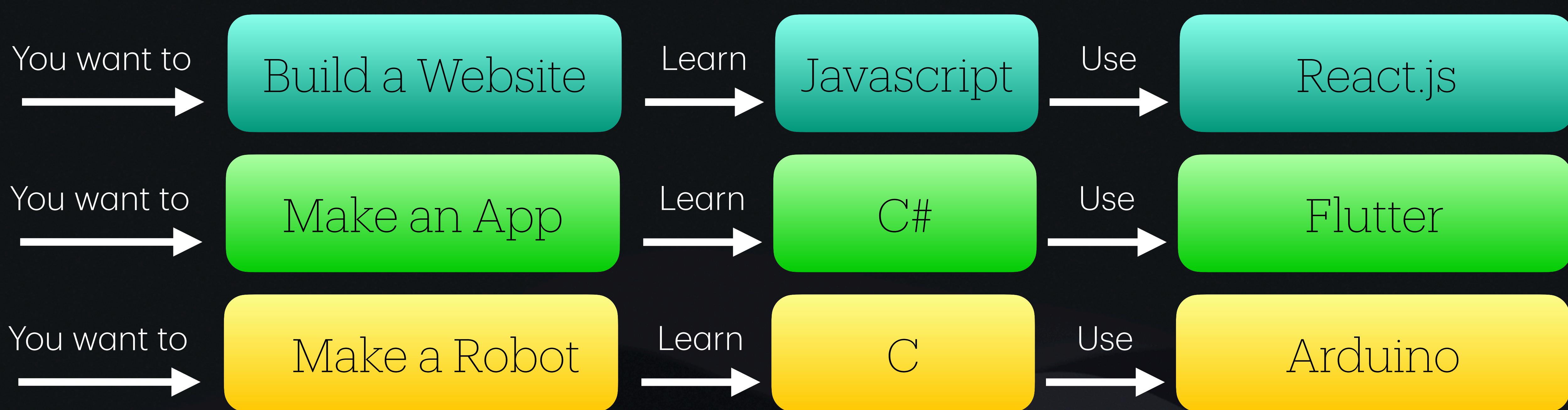
Use

React.js

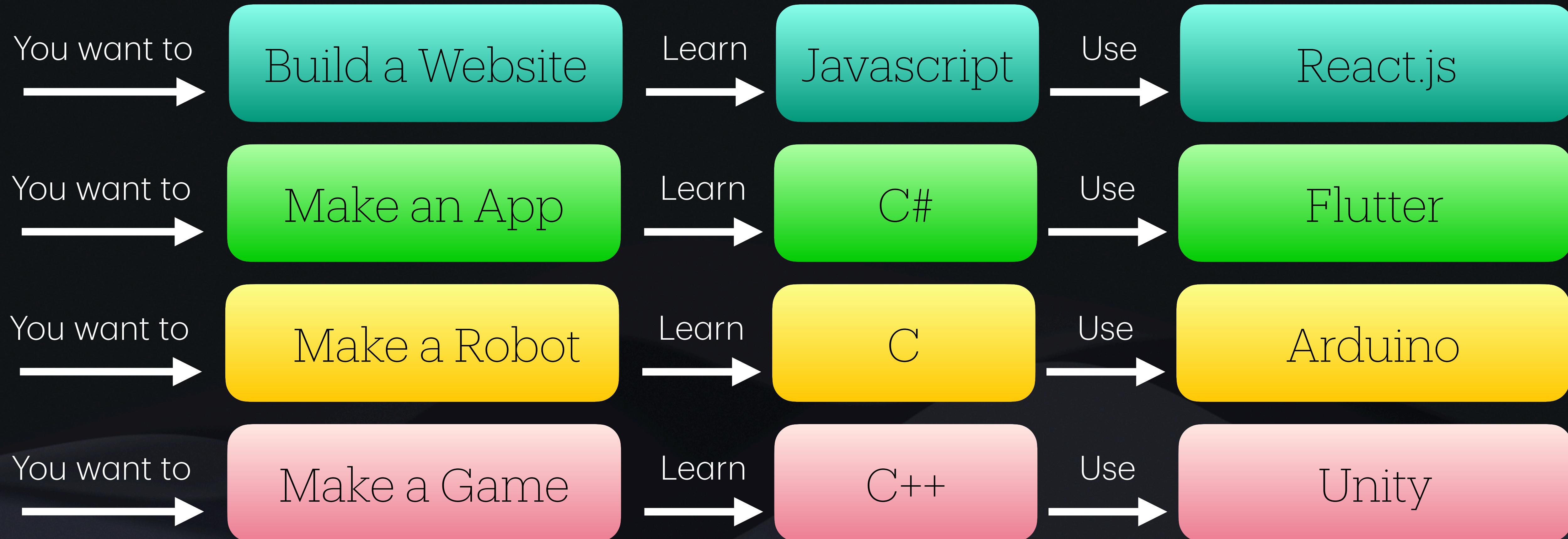
Get Started!



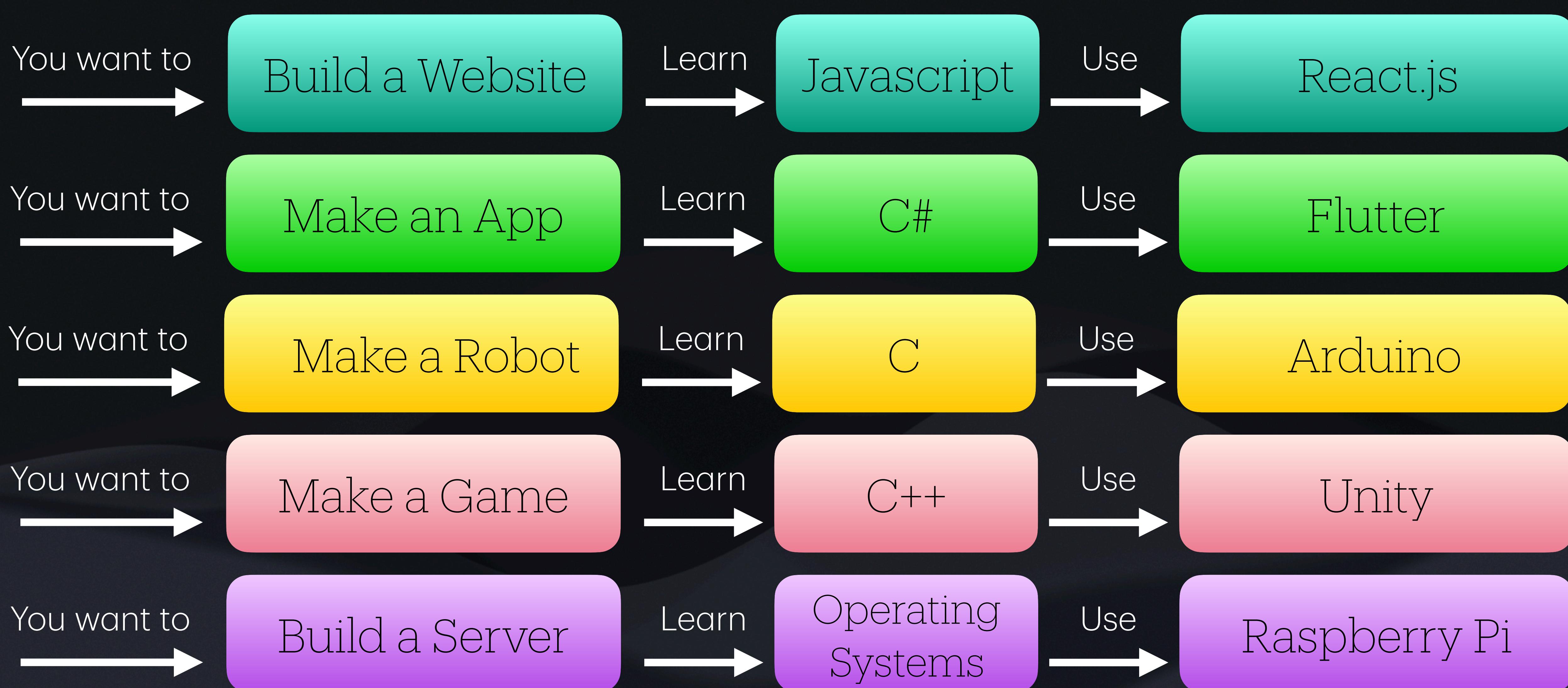
Get Started!



Get Started!



Get Started!



Resources

- Beginner -> Codecademy: <https://www.codecademy.com/>
- Interactive -> Brilliant: <https://brilliant.org/>
- Learn by Gaming -> Code Combat: <https://codecombat.com/>
- Advanced Problems -> LeetCode: <https://leetcode.com/>
- YouTube!

A black and white photograph of a modern architectural interior. The walls are composed of numerous dark, rectangular panels that curve and overlap, creating a rhythmic, undulating pattern across the entire surface. The lighting is dramatic, coming from the side, which highlights the texture of the panels and the shadows between them.

Thank You!



Thank You!

Sean Schuchman
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Slideshow
↓

