

# Getting a Job and the Future of SE

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# Agenda

- Who am I and what am I doing here?
- Software engineering in 2026
- Implications for job interviews and careers

“Who are you and what are you  
doing here?”

*About me*

# About me

- SE @ IBM 2012-2017
- SE @ IBM Research intern, 2018
- SE @ Microsoft Research intern, 2019
- 50+ papers on SE

- I run ECE's SE and Adv SE

## Claude account list

[jamiedavis314@gmail.com](mailto:jamiedavis314@gmail.com)

- Backup: 80% used up for the week, resets probably Sunday 3PM

[bcakar@purdue.edu](mailto:bcakar@purdue.edu)

- Resets Monday 3AM. used up Wednesday noon

[scholaccess@gmail.com](mailto:scholaccess@gmail.com)

Resets Wednesday

[dualitylab2020@gmail.com](mailto:dualitylab2020@gmail.com)

Resets Thursday

*Claude MAX 20x (\$200/mo, strongest subscription)*

# What have I been doing with 4 Claude MAX 20x?

**DocAble**[Remediate](#)PDF EditorExamplesHelp/FAQ[Get Started](#)

Automated Accessibility Remediation for Educational Material  
*Tested on real lecture slides and documents: handwritten math, embedded equations, circuit diagrams, geological maps, stepper motors, moon photos, engineering schematics, and more.*

**PDF Editor**  
Edit and review remediated PDFs in your browser. Inspect the accessibility tree, correct alt text, and export the fixed file.  
[Open editor →](#)  
[Office formats: how to verify →](#)

**Examples**  
See real lecture slides and documents we've fixed — before and after, with accessibility scores.  
[Browse examples →](#)

**UPLOAD FILES TO REMEDIATE**  
  
Files will be automatically updated to improve accessibility.  
[How to check the result](#)  
[Bulk update guide \(LMS\)](#)  
  
Automated fixes don't catch everything (especially PDFs). Verify results in your document app's built-in checker.

Many of our improvements are visible to assistive technology but not to all users, and they always operate. These toggles let you customize behavior and control the visible-to-all changes.

**ALL FORMATS**  
Replace existing alt text where ours is better  
Reduce oversized images to 150 dpi for smaller filesizes  
Replace math pictures and raw math with OMML (better accessibility for screen readers)  
Add context for alt-text generation  
Audience level (for alt-text vocabulary)  

4-6

  
Calibrates vocabulary, terminology depth, and acronym handling. Off (default) leaves alt-text uncalibrated.

☐ **Format-specific changes**

PDF P W X

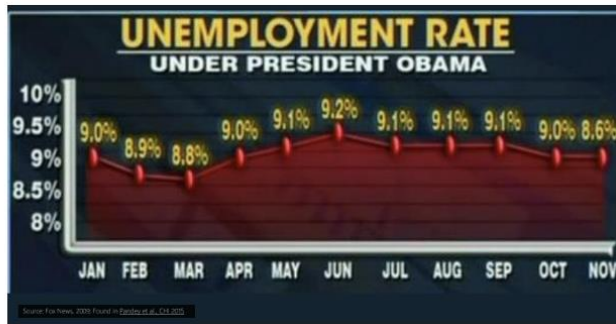
  
P W X PDF ZIP  
Drop files here or [browse](#)

.pptx, .docx, .xlsx, .pdf, folder, or .zip

Max file size: ...  
Max pages: ...

# Example

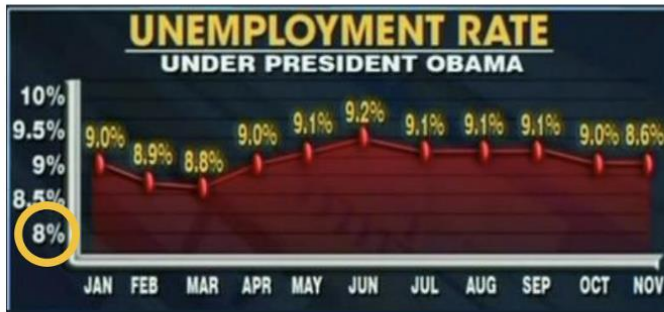
9



Fox News, 2009. Slides from Jon Froehlich.

10

Y-axis baseline



Fox News, 2009. Slides from Jon Froehlich.

This chart is nearly identical to the previous one, showing the unemployment rate under President Obama from January to November, with the y-axis from 8% to 10%. Data points are: January 9.0%, February 8.9%, March 8.8%, April 9.0%, May 9.1%, June 9.2%, July 9.1%, August 9.1%, September 9.1%, October 9.0%, November 8.6%. The main difference is a yellow circle highlighting the 8% mark on the y-axis, drawing attention to the truncated axis. The chart is sourced from Fox News, 2009, and the slide is credited to Jon Froehlich.

# Why have I been doing this?

*The existential crisis of SE (and all knowledge workers):*

*When AI can write code (and manipulate spreadsheets, and write training manuals, and do fraud detection, and underwrite loans, and...)*

*What is the role of a (software) engineer?*

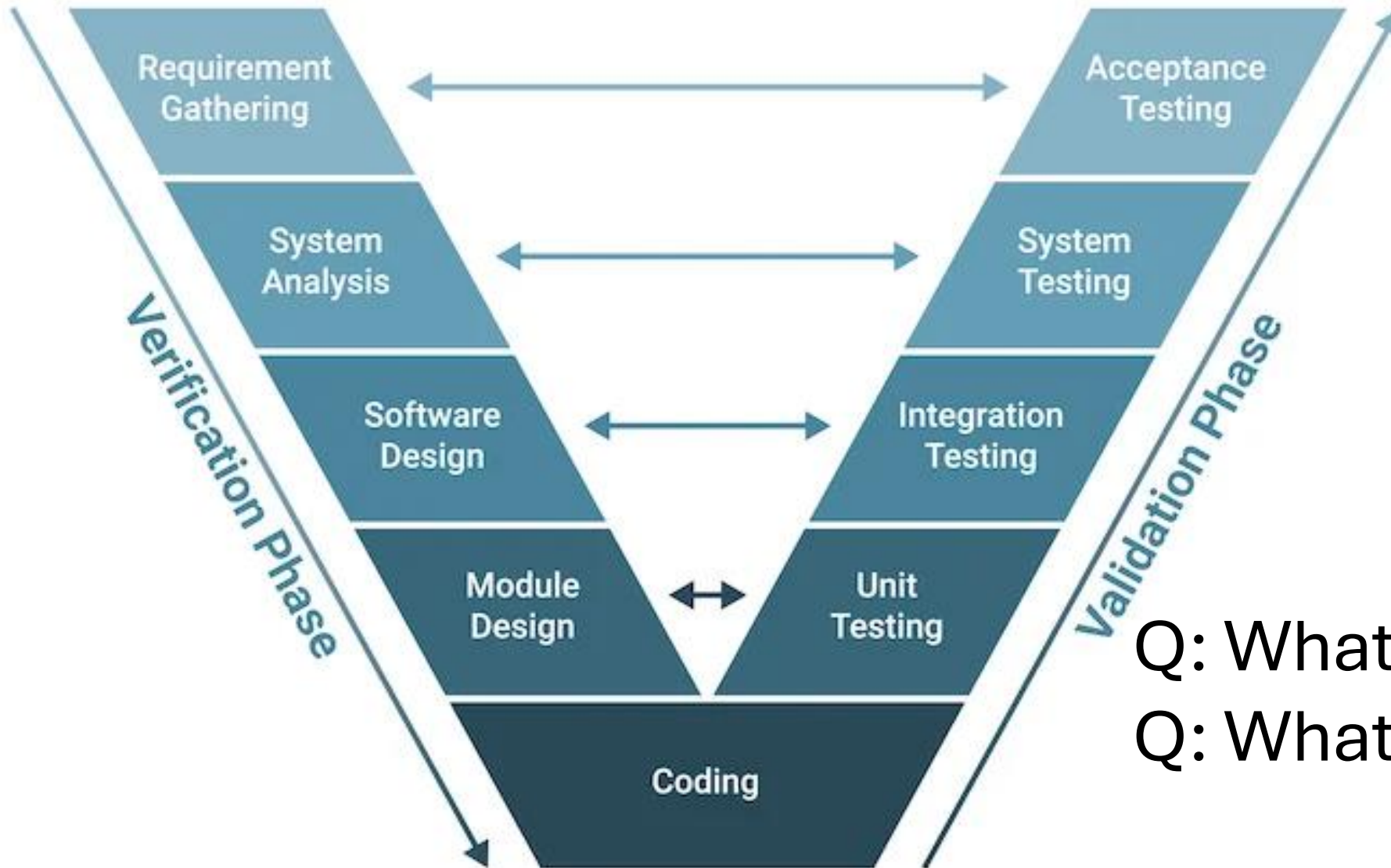
**My way to answer this question has been to undertake SE work using AI, and see what value I can add.**

# SE in 2026

*What I've learned by building DocAble*



# 1. Amdahl's Law and the V-Model



Q: What part does AI do?

Q: What part is left?

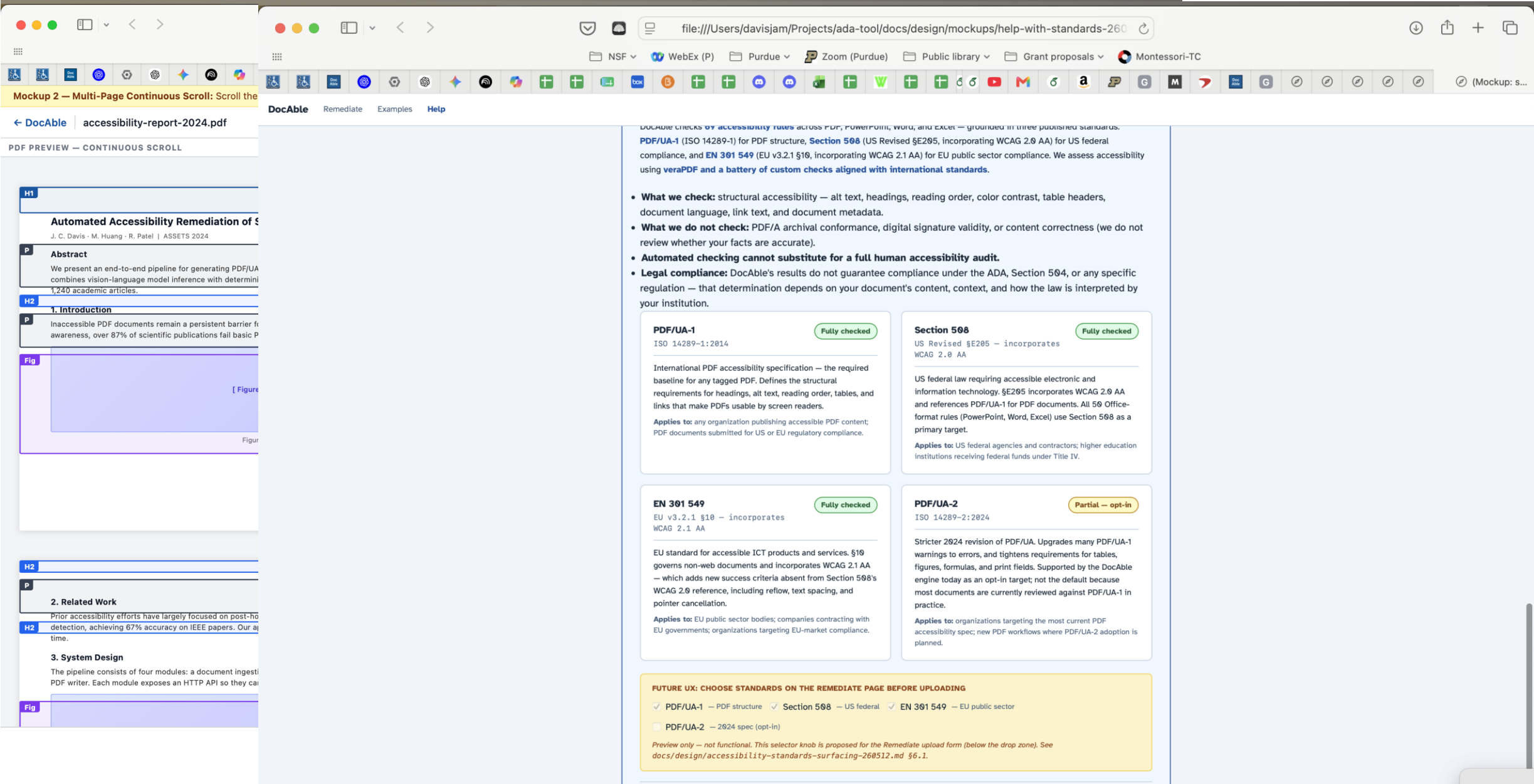
## 2. Agentic SE changes the economics of exploration, not just implementation

Waterfall (1970)

→ Agile (2005)

→ ***Hyper-Exploration (2026)***

# Example: Exploring UX



### 3. Agentic SE is a problem in controls

“Write me code”

“Write me code following this design”

“Write me code following this design, and then ask this other agent to review it”

“...following this rubric”

“Write static analyses and tests to validate your implementation”

### **Not just code – also management**

“Design an Epic containing discrete tasks”

“Orchestrator, manage the Epics, prioritizing this one; Opus slot for DoDs

## 4. Refuse workflow friction

# 5. GenAI is the fastest road to Hell

## Two forms

1. “Sure, let me help you implement that design”
2. “Oh, let me do a quick workaround”

## 6. GenAI is addictive

- I have been sleeping 4-6 hours/night since May 1

4. Good agent supervision is calibrated skepticism under information disadvantage



# What does it mean for SE job interviews and careers?

*Are we cooked?*

# New world, same as the old world

- Some companies are adding AI interviews
- Some are banning AI
- Both of these positions are reasonable
- Technologists are obligated to mastery of all technology