Devin AI

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Introduction

Devin was developed by startup Cognition AI

Fully autonomous software engineer

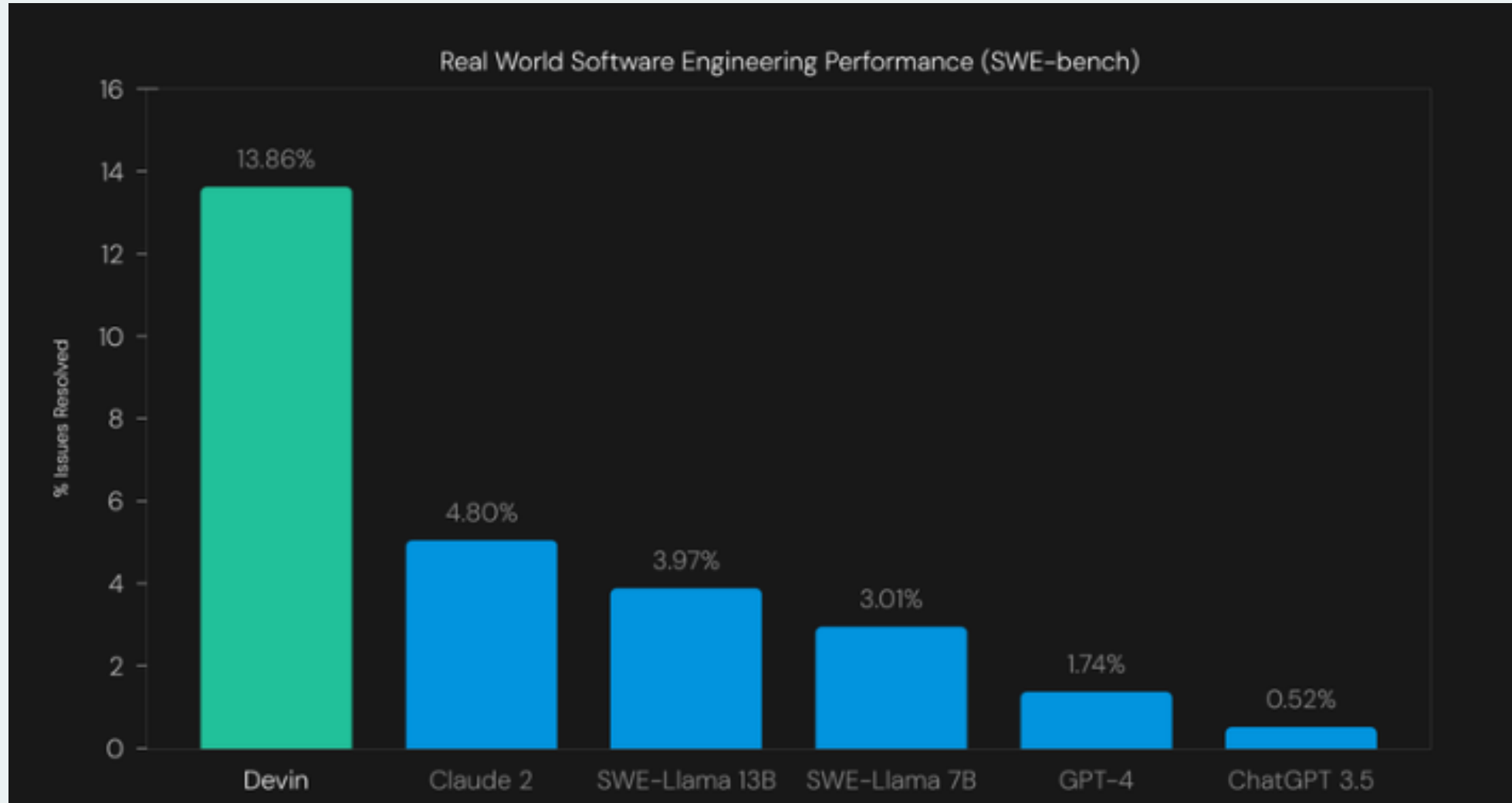Devin goes through whole development process to produce software

Devin is built to be integrated into any development team

Context

- Software companies use AI
  - 90% currently or plan to use

- AI cannot solve every problem
  - 96% of Simple Problems
  - <5% of Challenging Problems

Comparison with Other Software

Real World Software Engineering Performance (SWE-bench)

Evaluation of Devin

- Input
- Step-By-Step Plan
- Multiple Tools
- Debugging
  - Inserting print statements
  - Examine logs
- Output

Demo From Cognition

AI Software Engineer Plants Secret Messages in Images (youtube.com)

Effect on Junior Developers

- Lacks creativity, problem-solving, and personal skills
- Tools to improve human developers to code production
- May reduce the number of developers needed
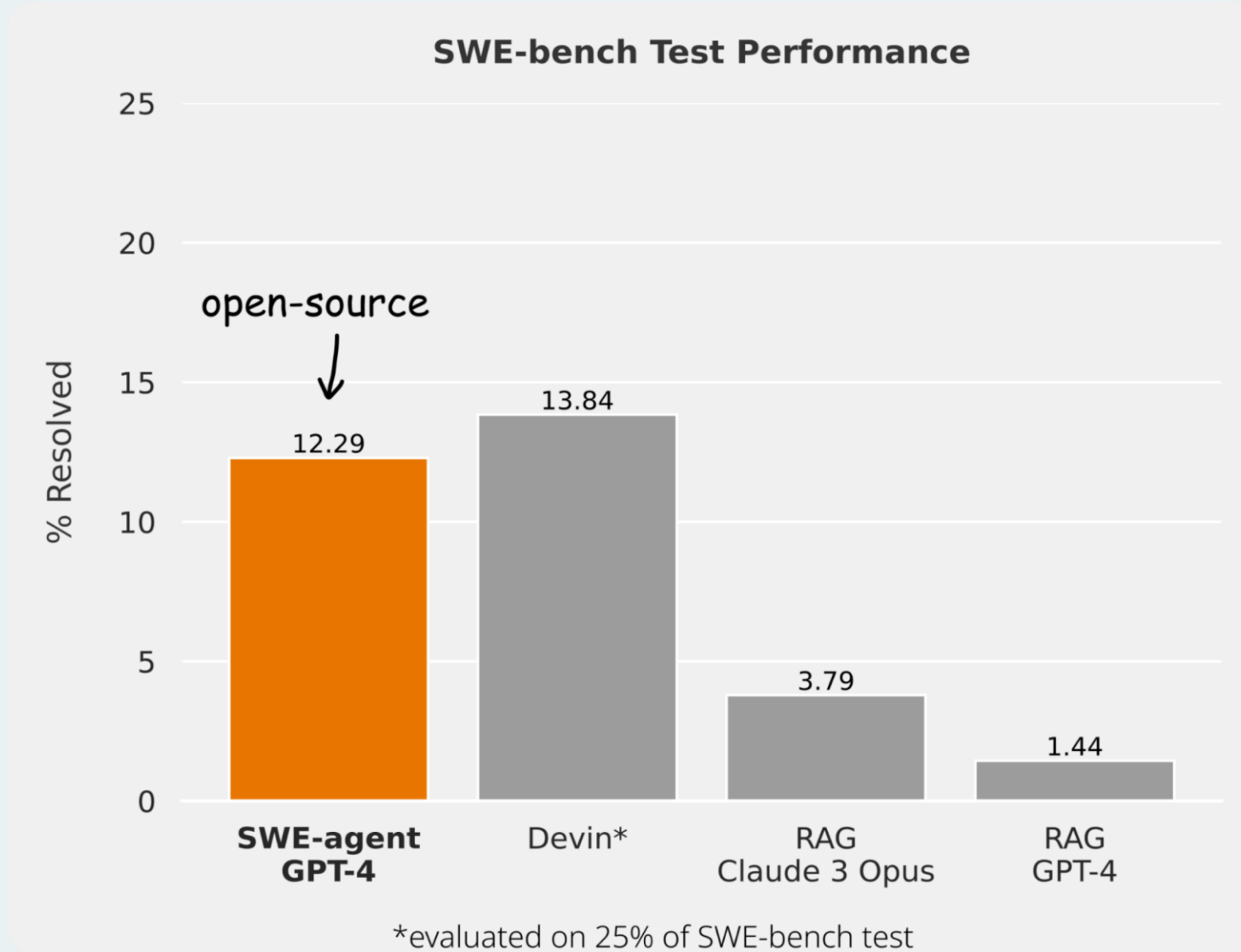- Effects of Devin will not be detrimental to the industry

Limitations

- Lack of Communication With Stakeholders

- Large Parts of the Video Feed Have Been Cut

- Problems Have Been Selected

Extending Cognition's Work

- Future Devin models will be improved

- Other SE models are being developed

SWE-Agent

Discussion