#### Al & The Intellectual Trades

Experiences, Impact and the Road Ahead

#### About Me.

#### Background

- VP of Software Development at CertainPath
  - 5 Software Engineers
    - 1 Field Services SaaS Application with iOS / Android Apps
    - 1 "Customer OS" for Finance, Ops, Learning, Rebates & Marketing
    - 1 Internal Finance Hub Application
- Almost 30 years in Software, 19 in Leadership roles
- In Austin since 2016

## Agenda

#### The Question on Everybody's Mind ...

# When will Al replace humans in organizations?

#### Agenda

- My Team's Journey with Al
- Lessons Learned
- Impact
- Future

## Al and my Team

#### Types of Al

- Companion Al
  - Assists you as you're doing things.
  - You know what you're doing, and can validate things.
- Agent AI (... Vibe ... \*sigh\*, coding.)
  - Does things for you.
  - You may or may not know what you're doing.

#### My Team's Journey with Al

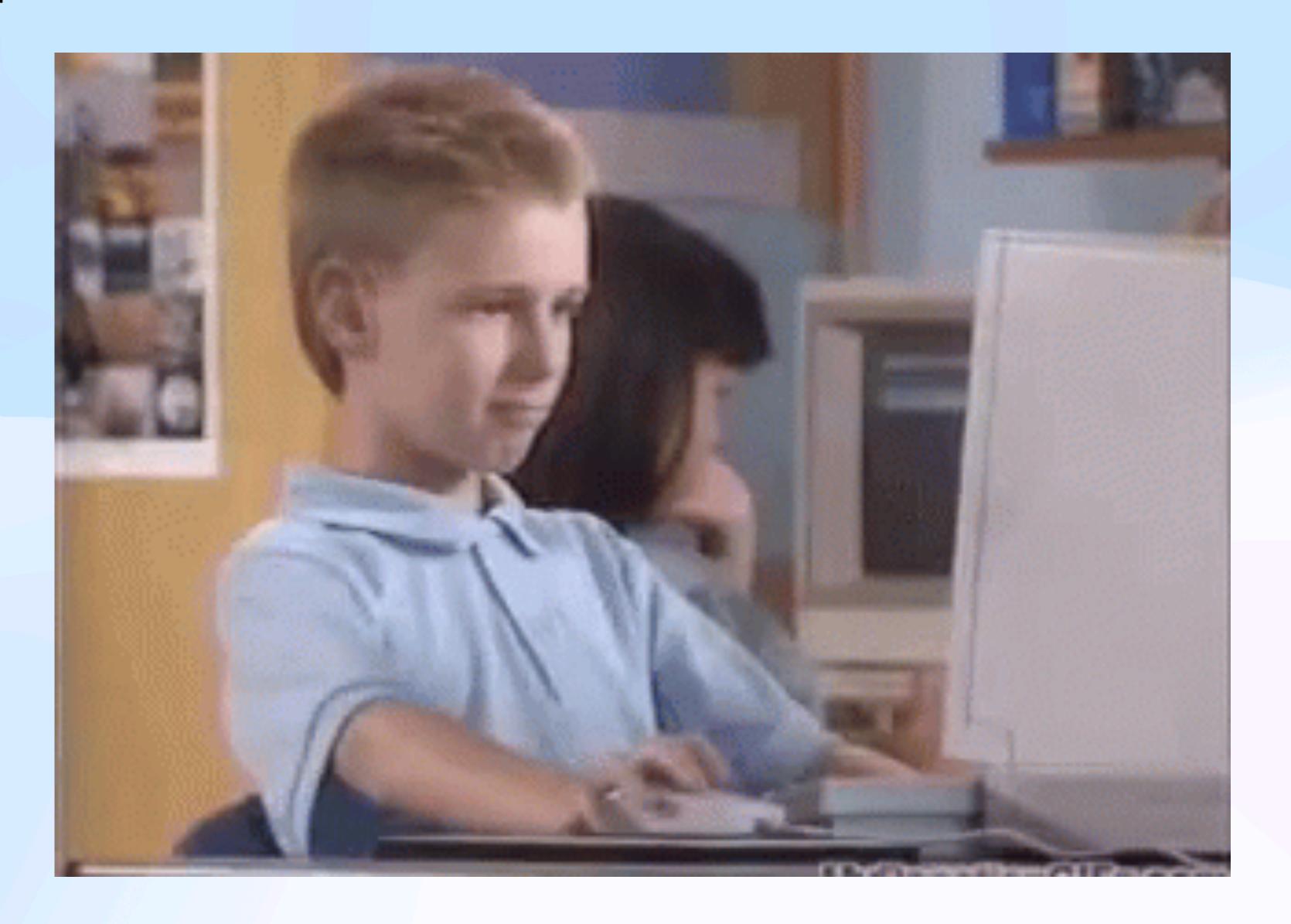
- 2023 Mostly Companion Al
- 2024 99% Companion AI, 1% Agent (Agent was ... painful.)
- 2025 95% Companion AI, 5% Agent (Incubating Agent, promising results)

#### Lessons Learned

#### Lessons Learned: Companion Al

- Companion Al
  - Saves us batches of 5 to 30 minutes throughout the day.
  - Increasingly helpful at Troubleshooting and Rubber-Ducking.
  - Great tool if you know your craft well.
  - 95% positive.

#### Companion AI ...



#### Companion AI ...



#### Lessons Learned: Agent Al

- Agent Al
  - Pretty awful in 2024
  - 2025 has yielded some impressive results ...
    - But also terrifying: Faked-Out Deliveries, Bugs, Hallucination Loops
  - 50% Positive
  - Risk must be mitigated

#### Agent AI ... 50%



#### Agent AI ... 50%



## Impact: Team

#### Impact of AI on our Team

- We've been able to "Say Yes to More", with same team size.
- Companion Al with sharp Engineers ==> Massive Productivity Boost.
- Agent AI with non-Engineers: (Vibe Mode)
  - Some impressive results with early prototyping, early vetting of products by stakeholders, builds trust and saves iterations in "engineering phase".
  - Risk Mitigation remains challenging. We built a safe "Labs" Environment.
- Sharp Engineers are Key.

## Impact: Industry

## https://www.theguardian.com/global/2025/jun/02/artificial-intelligence-jobs-techscape

Al threatens the job you had after college

The Washington Post reported in March that more than a *quarter of all* computer programming jobs in the US vanished in the past two years

"I see the bottom rung of the career ladder breaking"

"The labor market for recent college graduates deteriorated noticeably in the first quarter of 2025"

### **Future**

#### Where we're headed

- Sharp Engineers were once Junior Engineers
- Overall pool of sharp Engineers will dwindle rapidly
- Agent Al gains more ground every single week
- With less sharp Engineers, Agent Al Risk becomes impossible to mitigate
  - Time and money will be lost.
- This evolution is likely to impact many intellectual trades

#### Possibilities

#### Possibilities: Redefining "Sharp"

- Sharp ≠ "years of experience"
- The Good ...
  - Al can accelerate true learning.
  - Avoid hours googling things: 100x more productive learning paths w/ Al
  - Folks can "sharpen" at a craft at an accelerated rate.
- The Bad ...
  - Folks are faking acumen, leaning too much on Al, and wasting money.

#### Possibilities: Be a Driver of Growth

- Investigate how AI can help your workflows
- Demonstrate your Al adoption to your manager and stakeholders
- Create new opportunities for your business
- Help stave-off or reduce layoffs

#### Who here has ideas?

#### Possibilities: Hedge your Bets

- If companies can do more with AI with less employees ...
  - ... More employees could become solopreneurs.
  - "Today's layoffs could be tomorrow's Competition".
- Turn your intellectual trade into a Business, use Al to offer more
- Harness Al Automation in: Marketing, Sales & Accounting
- Use Al to put together a business plan.
- Moonlight early, moonlight often.

#### Possibilities: Transitions

- While mainstream players might reduce workforce.
- More companies will emerge as cost of bootstrapping reduces.
- Reduced reliance upon Venture Capital.
- From Mega Corporations catering to millions of paying customers.
- Millions of entre(solo)preneurs actively engaged in a peer-to-peer economy.
- Increased share of GDP generated outside of Employer/Employee paradigm.

## Thank You.