Building and running a diversity-focused pre-internship program for SRE





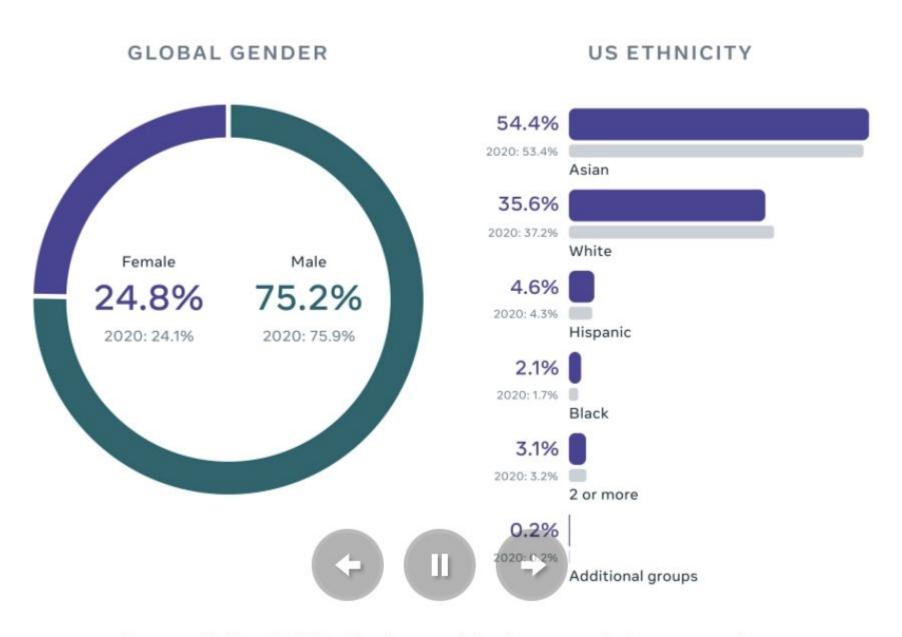
The "big tent" of SRE

Operations Engineer production Engineer Site Reliability Engineer Platform Engineer Release Engineer System Engineer DevOps Engineer Infrastructure Software System Administrator Cloud Engineer Engineer

Diversity in Tech is a big problem. This is a small step.

At Meta, three quarters of Tech employees are men, and over 90% are either White or Asian

Tech



*Data was pulled June 30, 2021 and have been rounded to the nearest tenth of a percentage point.

https://about.fb.com/news/2021/07/facebook-diversity-report-2021/

Barriers to early-career diversity hiring

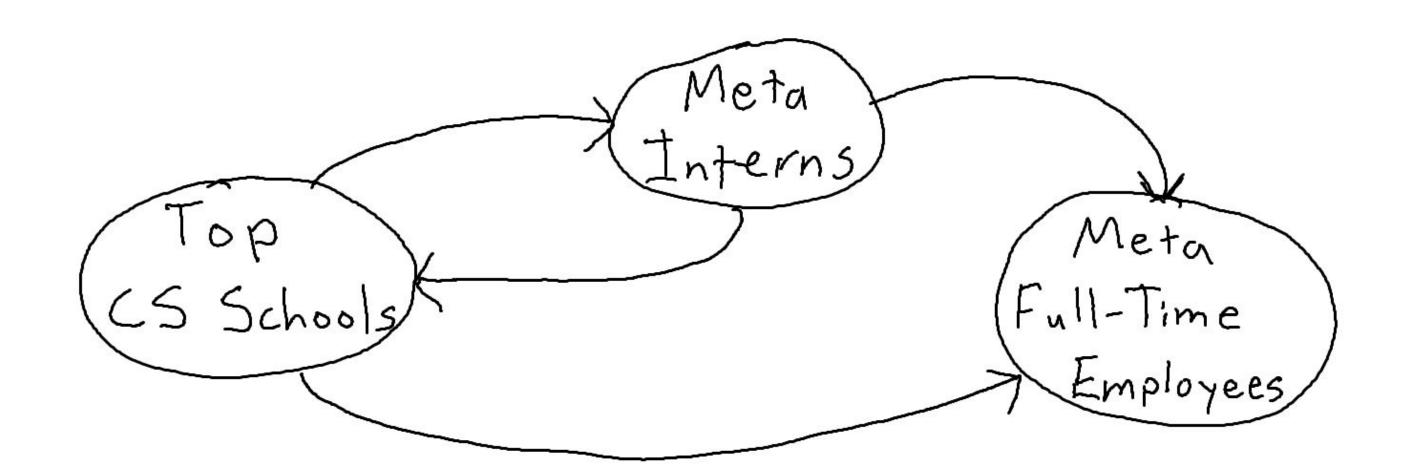
- 1. Interest: SRE not well-known as a career path
- 2. Theory: SRE concepts not taught in school
- 3. Practice: Students lack interview skills
- 4. Access: "You can't be what you can't see"

We need to address all of these!



Most early career hires at Meta are former interns.

Many are from top CS schools, in a self-reinforcing cycle.



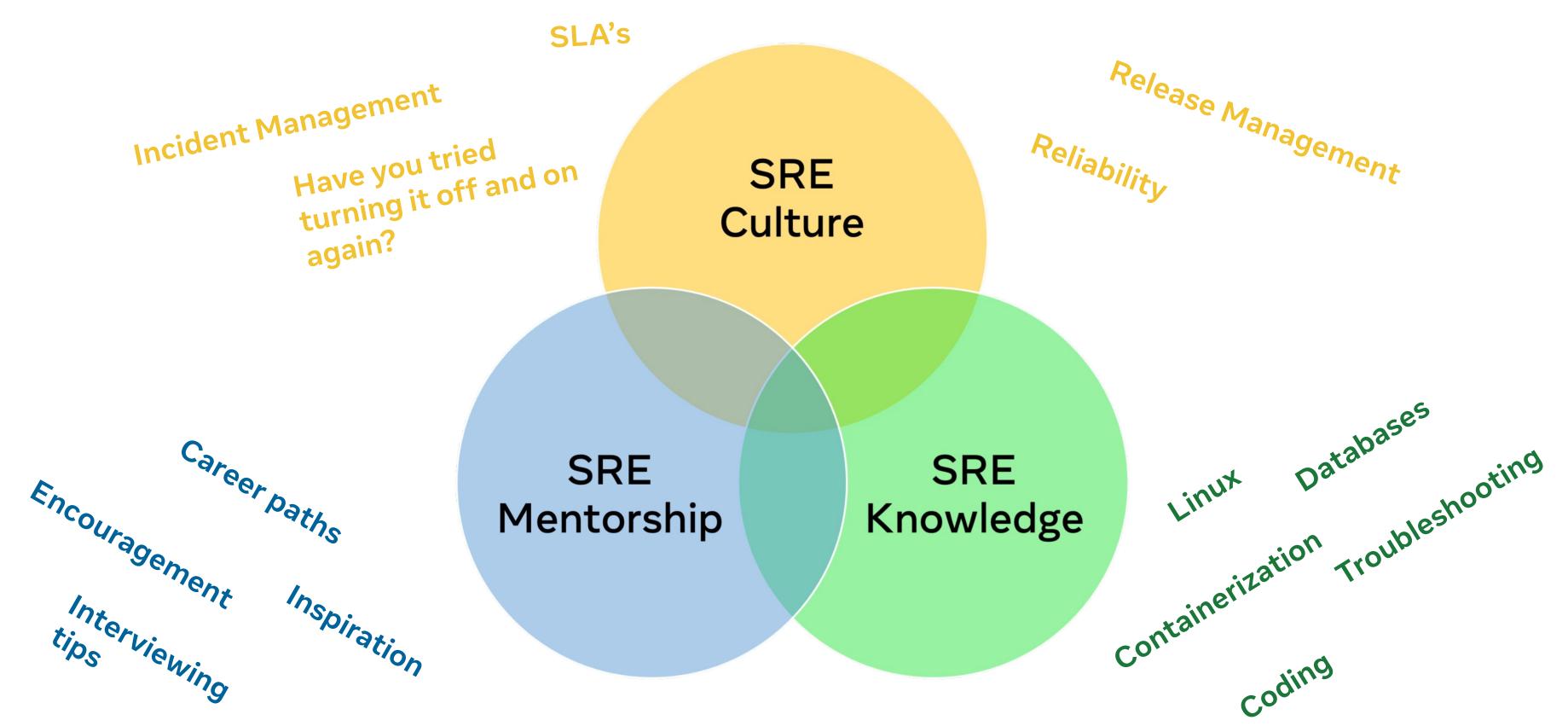
Our solution:

A pre-internship fellowship program

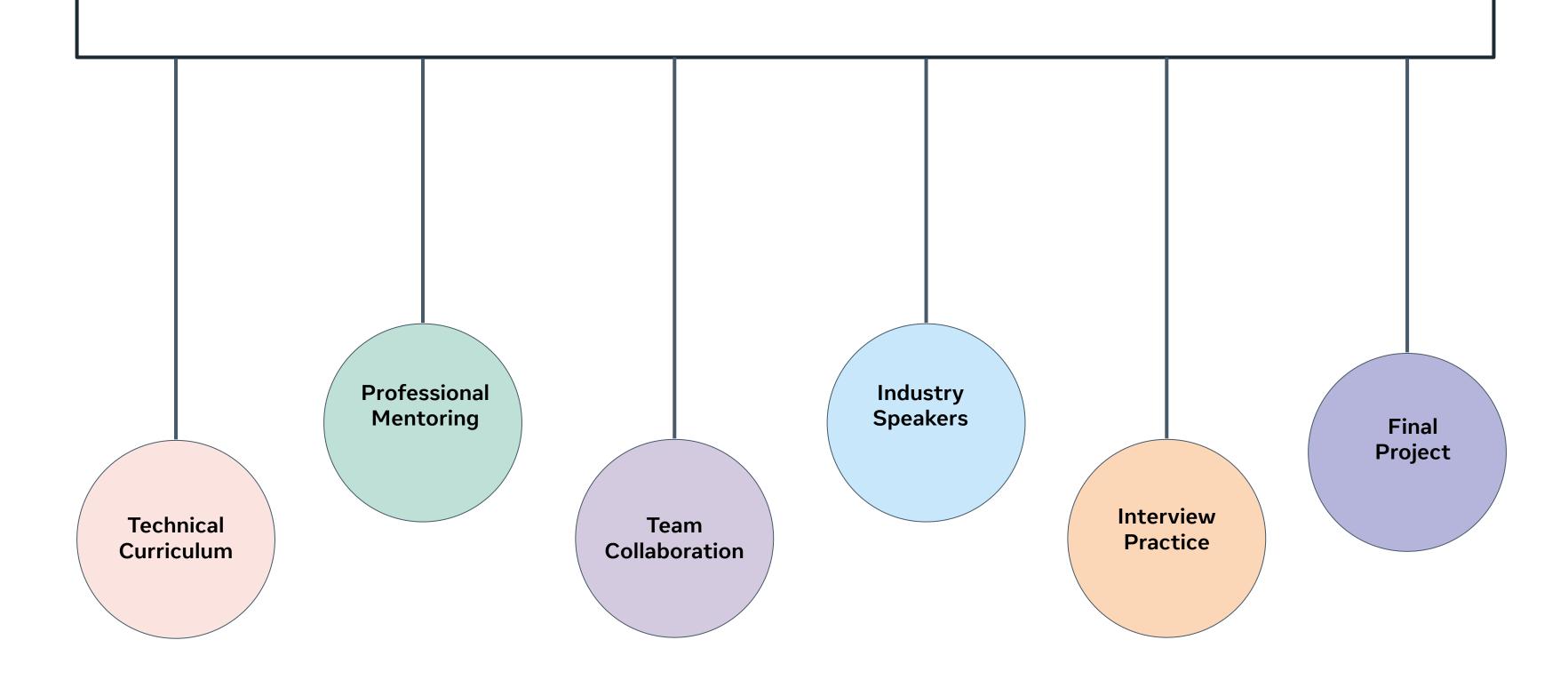
Our goal:

Recruit a diverse group of ~100 college students and prepare them for an SRE internship at Meta.

What would such a program look like?



12 Week Fully Remote Summer Program

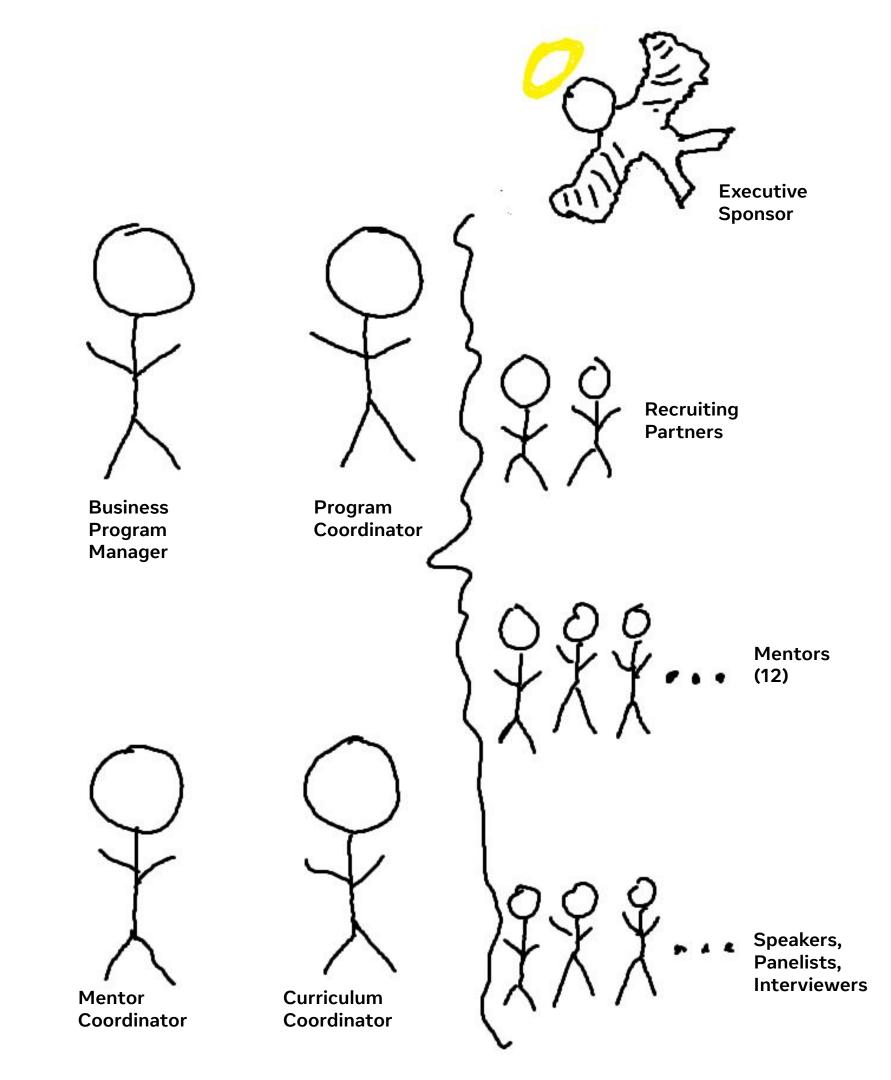


But how?



Pillar 1: The Meta Team

A small core team with strong executive support and a larger supporting group



Pillar 2: Curriculum partner

Granted us a royalty-free license for key Linux instructional content for use in the program



Pillar 3: Fellowship administration partner

- Recruiting Fellows
- Curriculum
- Day to day program running
- Funds disbursement



12-week 2021 Fellowship Outline

Week 1: Intro to SRE/basic tools

Week 2: Bash scripting/shell primer

Week 3: Services+Databases

Week 4: Containers

Week 5: Testing + CI/CD

Week 6: Monitoring

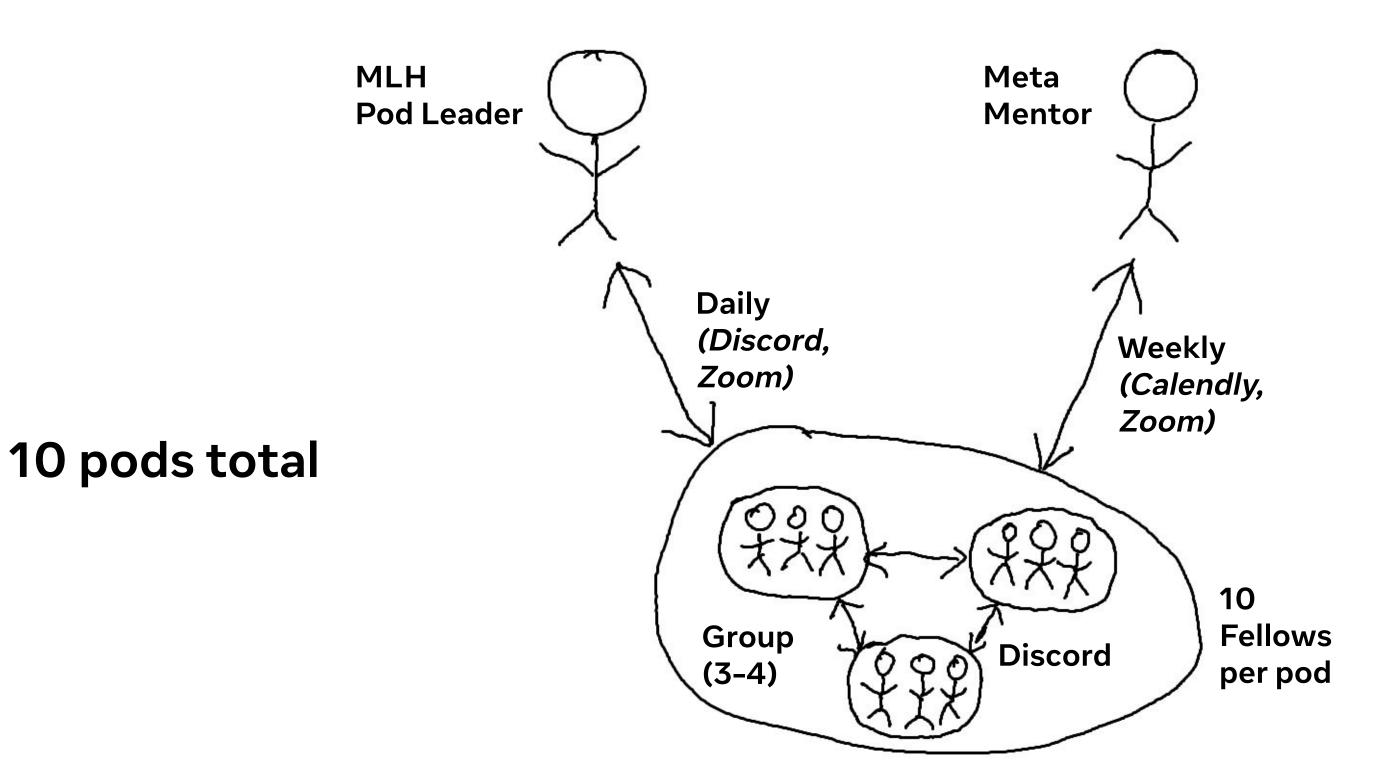
Week 7: Career week

Week 8: System troubleshooting

Weeks 9-12: Final Project

Plus weekly panels + presentations from Meta & industry speakers!

Fellowship interaction layout: sample pod



Fellows worked hard and had a great experience

- 95% Fellows graduated
- 77% spent 25+ hours a week on Fellowship
- 95% daily attendance in sessions

Category	KPI	Goal	Actual	Delta	
Completion	# Fellows who graduate	75	91	21.3%	
Satisfaction	% overall satisfaction rate	85%	96%	12.4%	
Interest	# of Fellows who apply to SRE-style jobs	50	76	52%	

Fellows understand SRE as a career path

Prompt	Week 1	Week 12	Delta
I know what PE looks like as a career path.	56%	100%	78%
I have a good understanding of what PE does day-to-day.	40%	98%	144%
I know what skills I need to become successful in PE.	46%	98%	112%
I have the skills necessary to become successful in PE.	43%	80%	1 87%
I think of PE as a good career path for me.	75%	85%	12%

Fellows are turning their experience into SRE jobs

- ~50% have jobs/internships lined up
- 23% have SRE-type roles
- 56% report using SRE skills in their jobs
- 87% said Fellowship gave them advantages in the interview process

Confirmed SRE placements include:



- Oracle
- Microsoft
- Intuit
- Intel
- Tata
- Vanguard

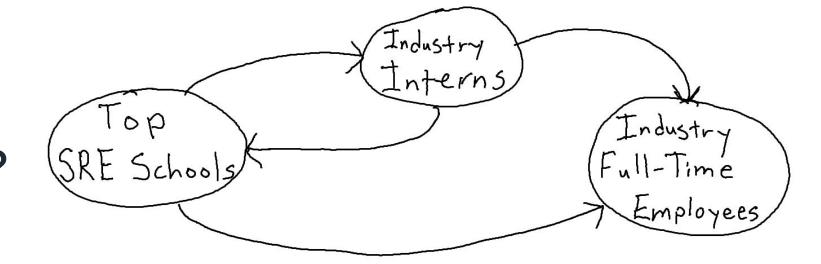
What needs improvement for 2022?

- 1. Less theory, more project work
- 2. More interview practice
- 3. Faster identification of trouble spots
- 4. Better recruiting support



Thinking ahead: Scaling 10x

- 1. Seed new schools
- 2. Run similar programs at other orgs
- 3. Open source under the USENIX banner?



Call to action: how can you help?

- 1. Hire our Fellows!
- 2. Support a similar project at your company
- 3. Speaking/panelist/curriculum opportunities

Thank you! Questions?

The Meta team: <u>metamlh@fb.com</u>

For 2022 Fellowship info:

• Twitter: @mlhacks

- FB: https://fb.com/majorleaguehacking
- LinkedIn:
 https://linkedin.com/company/major-league-hacking
- Web: https://hackp.ac/meta-mlhfellowship



My background is not in Computer Science, but I have always had an independent passion for it. The MLH pht Fellowship has allowed me to turn my passion into a viable career!



Autumn C.
Cornell University, Class of '20

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