Building and running a diversity-focused pre-internship program for SRE
The “big tent” of SRE

- Production Engineer
- Site Reliability Engineer
- Platform Engineer
- System Engineer
- Infrastructure Software Engineer
- Cloud Engineer
- Operations Engineer
- Release Engineer
- DevOps Engineer
- System Administrator
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.
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?

SRE Culture

- Reliability
- SLA's
- Incident Management
- Have you tried turning it off and on again?

SRE Mentorship

- Career paths
- Encouragement
- Interviewing tips
- Inspiration

SRE Knowledge

- Linux
- Databases
- Containerization
- Troubleshooting
- Coding

Release Management
12 Week Fully Remote Summer Program

- Technical Curriculum
- Professional Mentoring
- Team Collaboration
- Industry Speakers
- Interview Practice
- Final Project
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

10 pods total

MLH Pod Leader

Meta Mentor

Daily
(*Discord, Zoom*)

Weekly
(*Calendly, Zoom*)

Group
(*3-4*)

Discord

10 Fellows per 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

<table>
<thead>
<tr>
<th>Category</th>
<th>KPI</th>
<th>Goal</th>
<th>Actual</th>
<th>Delta</th>
</tr>
</thead>
<tbody>
<tr>
<td>Completion</td>
<td># Fellows who graduate</td>
<td>75</td>
<td>91</td>
<td>↑ 21.3%</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>% overall satisfaction rate</td>
<td>85%</td>
<td>96%</td>
<td>↑ 12.4%</td>
</tr>
<tr>
<td>Interest</td>
<td># of Fellows who apply to SRE-style jobs</td>
<td>50</td>
<td>76</td>
<td>↑ 52%</td>
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</tbody>
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Fellows understand SRE as a career path

<table>
<thead>
<tr>
<th>Prompt</th>
<th>Week 1</th>
<th>Week 12</th>
<th>Delta</th>
</tr>
</thead>
<tbody>
<tr>
<td>I know what PE looks like as a career path.</td>
<td>56%</td>
<td>100%</td>
<td>↑ 78%</td>
</tr>
<tr>
<td>I have a good understanding of what PE does day-to-day.</td>
<td>40%</td>
<td>98%</td>
<td>↑ 144%</td>
</tr>
<tr>
<td>I know what skills I need to become successful in PE.</td>
<td>46%</td>
<td>98%</td>
<td>↑ 112%</td>
</tr>
<tr>
<td>I have the skills necessary to become successful in PE.</td>
<td>43%</td>
<td>80%</td>
<td>↑ 87%</td>
</tr>
<tr>
<td>I think of PE as a good career path for me.</td>
<td>75%</td>
<td>85%</td>
<td>↑ 12%</td>
</tr>
</tbody>
</table>
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: metamlh@fb.com

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 Fellowship has allowed me to turn my passion into a viable career!"

Autumn C.
Cornell University, Class of ’20