Industry Mentoring and Capstones for IT Students

Ken Hang, Green River College
Tyler Menezes, CodeDay
Kevin Wang, Mentors in Tech

Agenda

- Problems getting CC/CTC students into jobs
- How Tech Hires
- Student Support Needed
- Programs
- Results

The Problem

“We go to these companies and say what we want: mentors, capstones, interviews.

There’s always a first meeting and there’s never a second meeting.”

About Green River College

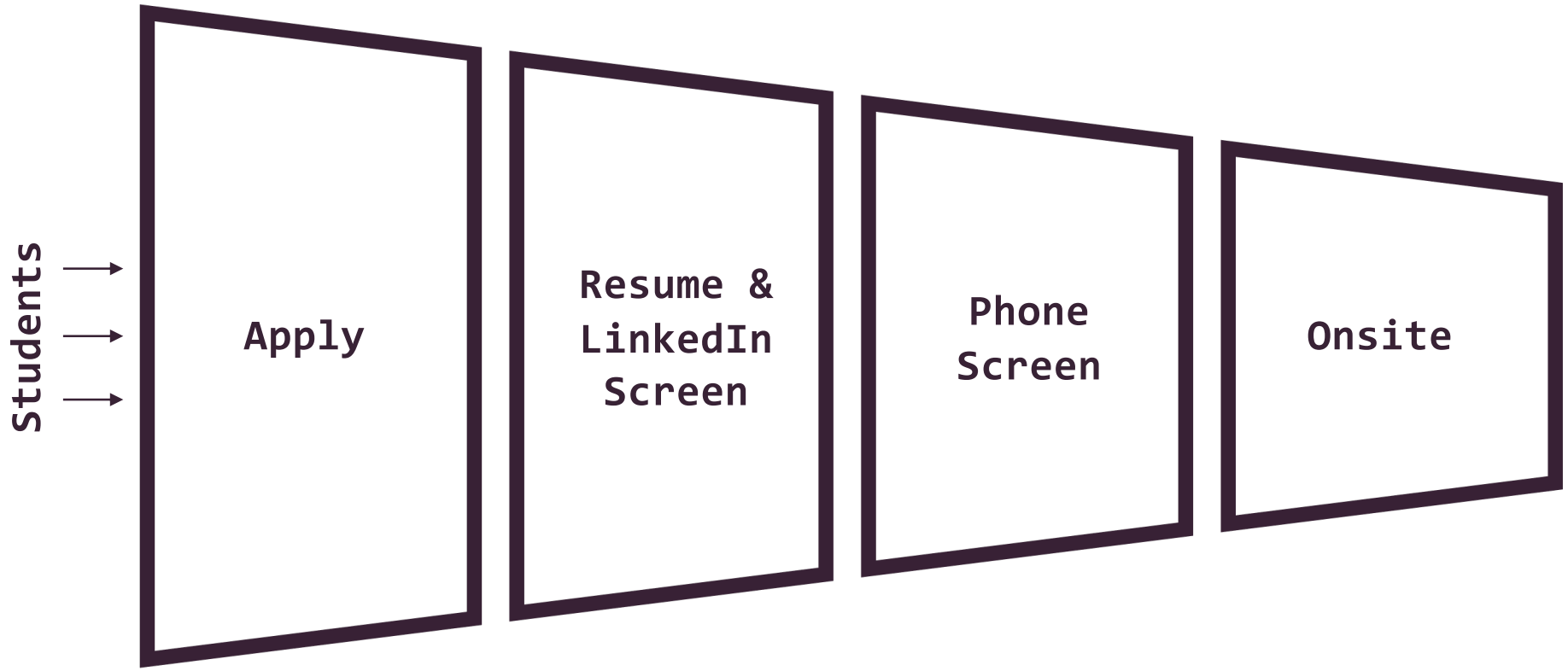
Internships & New Grad Jobs


Jessica

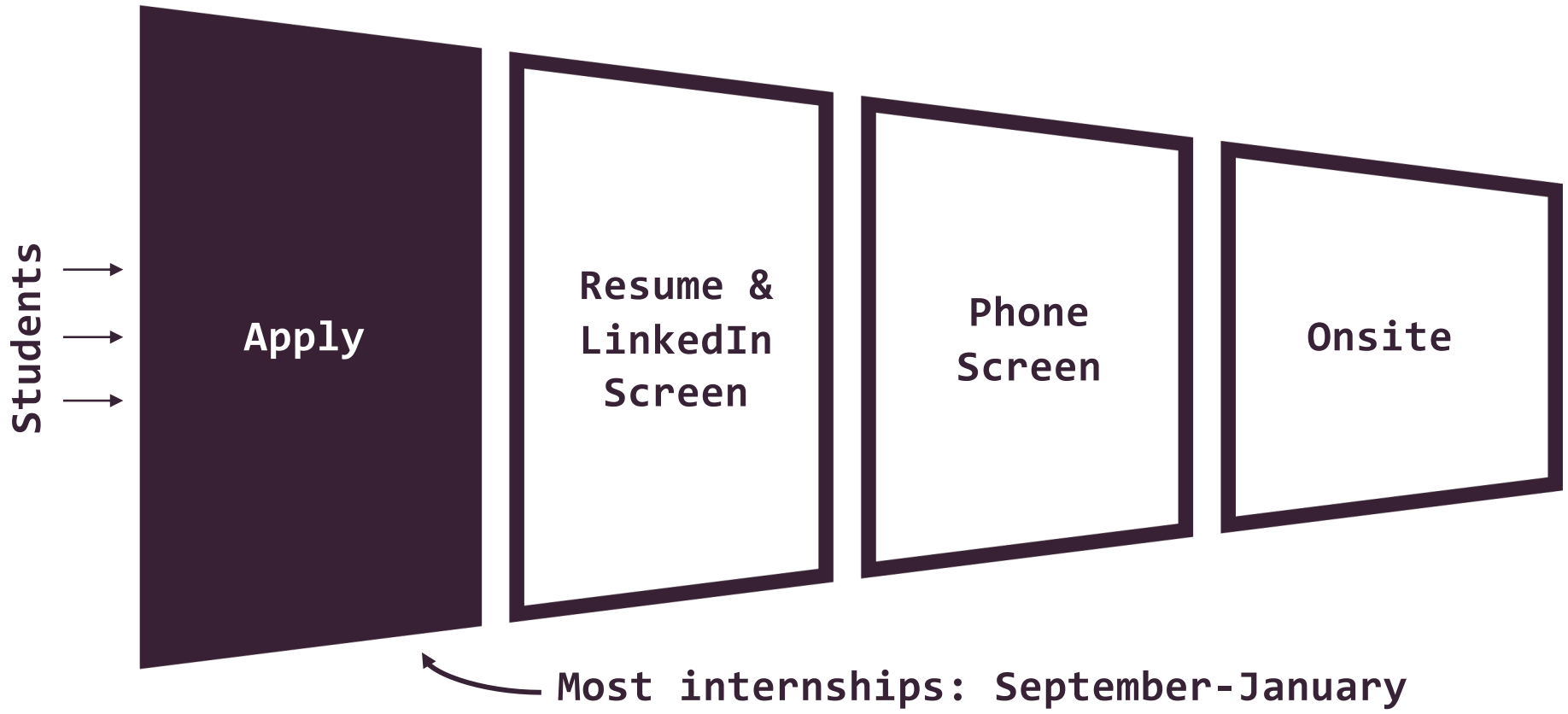

Samantha

How Tech Hires

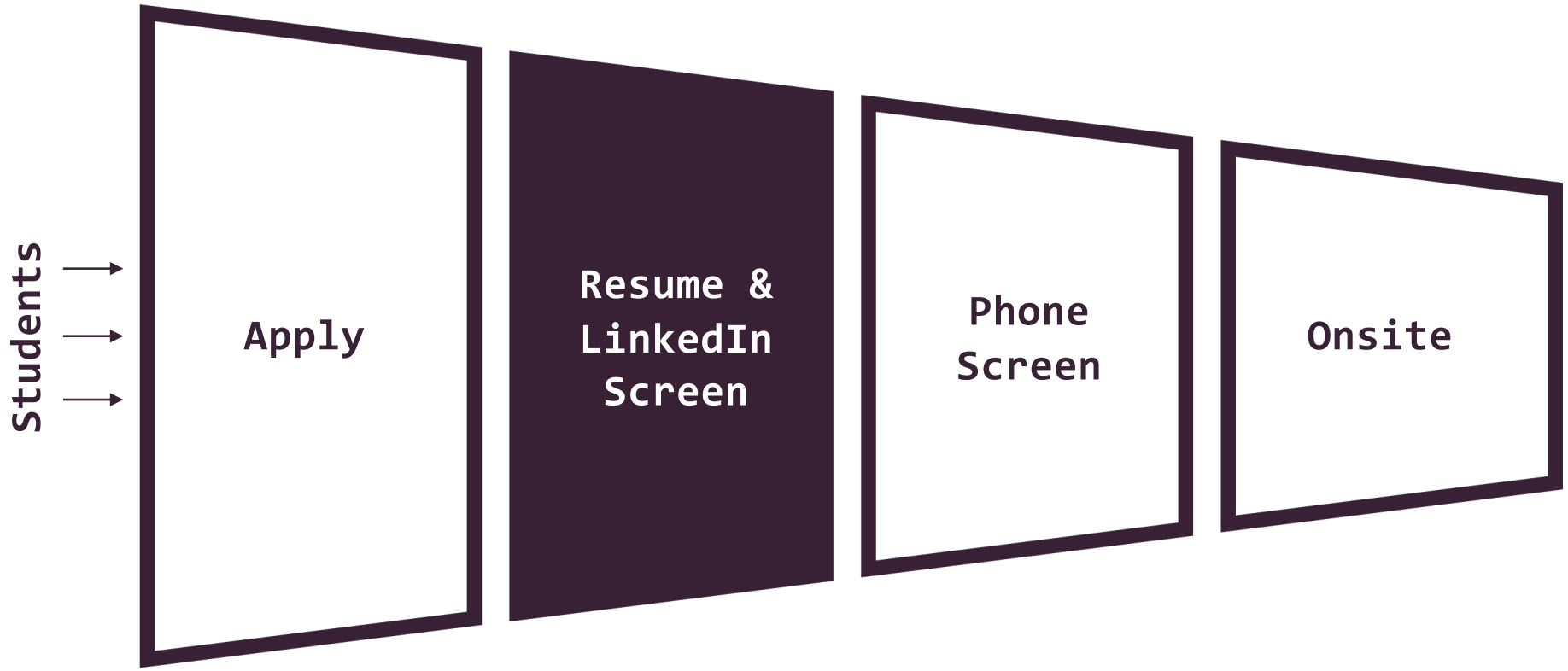
How Tech Hires



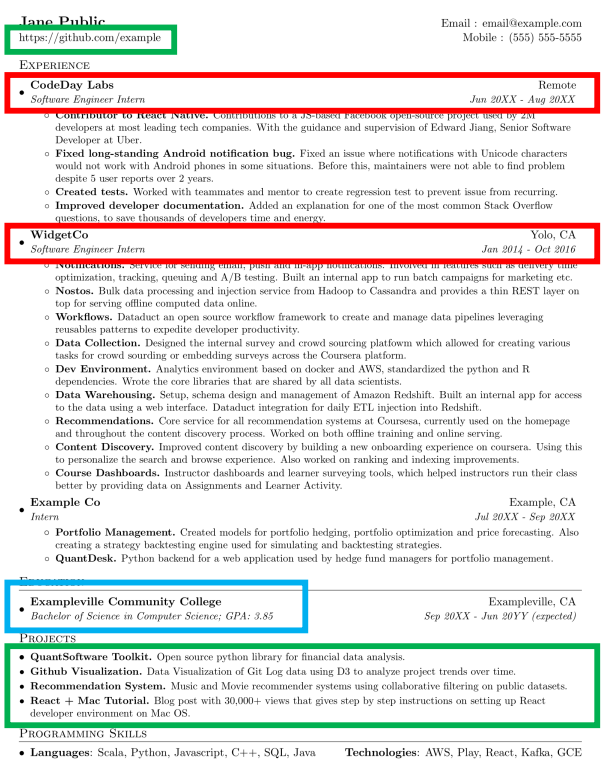
How Tech Hires



How Tech Hires



Recruiters Skim!



Jane Public
https://github.com/example
Email : email@example.com
Mobile : (555) 555-5555

EXPERIENCE

- **CodeDay Labs** — Remote
  Software Engineer Intern — *Jun 20XX - Aug 20XX*
  - **Contributor to React Native.** Contributions to a JS-based Facebook open-source project used by 2M developers at most leading tech companies. With the guidance and supervision of Edward Jiang, Senior Software Developer at Uber.
  - **Fixed long-standing Android notification bug.** Fixed an issue where notifications with Unicode characters would not work with Android phones in some situations. Before this, maintainers were not able to find problem despite 5 user reports over 2 years.
  - **Created tests.** Worked with teammates and mentor to create regression test to prevent issue from recurring.
  - **Improved developer documentation.** Added an explanation for one of the most common Stack Overflow questions, to save thousands of developers time and energy.
- **WidgetCo** — Yolo, CA
  Software Engineer Intern — *Jan 2014 - Oct 2016*
  - **Notifications.** Service for sending email, push and in-app notifications. Involved in features such as delivery time optimization, tracking, queuing and A/B testing. Built an internal app to run batch campaigns for marketing etc.
  - **Nostos.** Bulk data processing and injection service from Hadoop to Cassandra and provides a thin REST layer on top for serving offline computed data online.
  - **Workflows.** Dataduct an open source workflow framework to create and manage data pipelines leveraging reusables patterns to expedite developer productivity.
  - **Data Collection.** Designed the internal survey and crowd sourcing platfowm which allowed for creating various tasks for crowd sourding or embedding surveys across the Coursera platform.
  - **Dev Environment.** Analytics environment based on docker and AWS, standardized the python and R dependencies. Wrote the core libraries that are shared by all data scientists.
  - **Data Warehousing.** Setup, schema design and management of Amazon Redshift. Built an internal app for access to the data using a web interface. Dataduct integration for daily ETL injection into Redshift.
  - **Recommendations.** Core service for all recommendation systems at Coursesa, currently used on the homepage and throughout the content discovery process. Worked on both offline training and online serving.
  - **Content Discovery.** Improved content discovery by building a new onboarding experience on coursera. Using this to personalize the search and browse experience. Also worked on ranking and indexing improvements.
  - **Course Dashboards.** Instructor dashboards and learner surveying tools, which helped instructors run their class better by providing data on Assignments and Learner Activity.
- **Example Co** — Example, CA
  Intern — *Jul 20XX - Sep 20XX*
  - **Portfolio Management.** Created models for portfolio hedging, portfolio optimization and price forecasting. Also creating a strategy backtesting engine used for simulating and backtesting strategies.
  - **QuantDesk.** Python backend for a web application used by hedge fund managers for portfolio management.

EDUCATION

- **Exampleville Community College** — Exampleville, CA
  Bachelor of Science in Computer Science; GPA: 3.85 — *Sep 20XX - Jun 20YY (expected)*

PROJECTS

- **QuantSoftware Toolkit.** Open source python library for financial data analysis.
- **Github Visualization.** Data Visualization of Git Log data using D3 to analyze project trends over time.
- **Recommendation System.** Music and Movie recommender systems using collaborative filtering on public datasets.
- **React + Mac Tutorial.** Blog post with 30,000+ views that gives step by step instructions on setting up React developer environment on Mac OS.

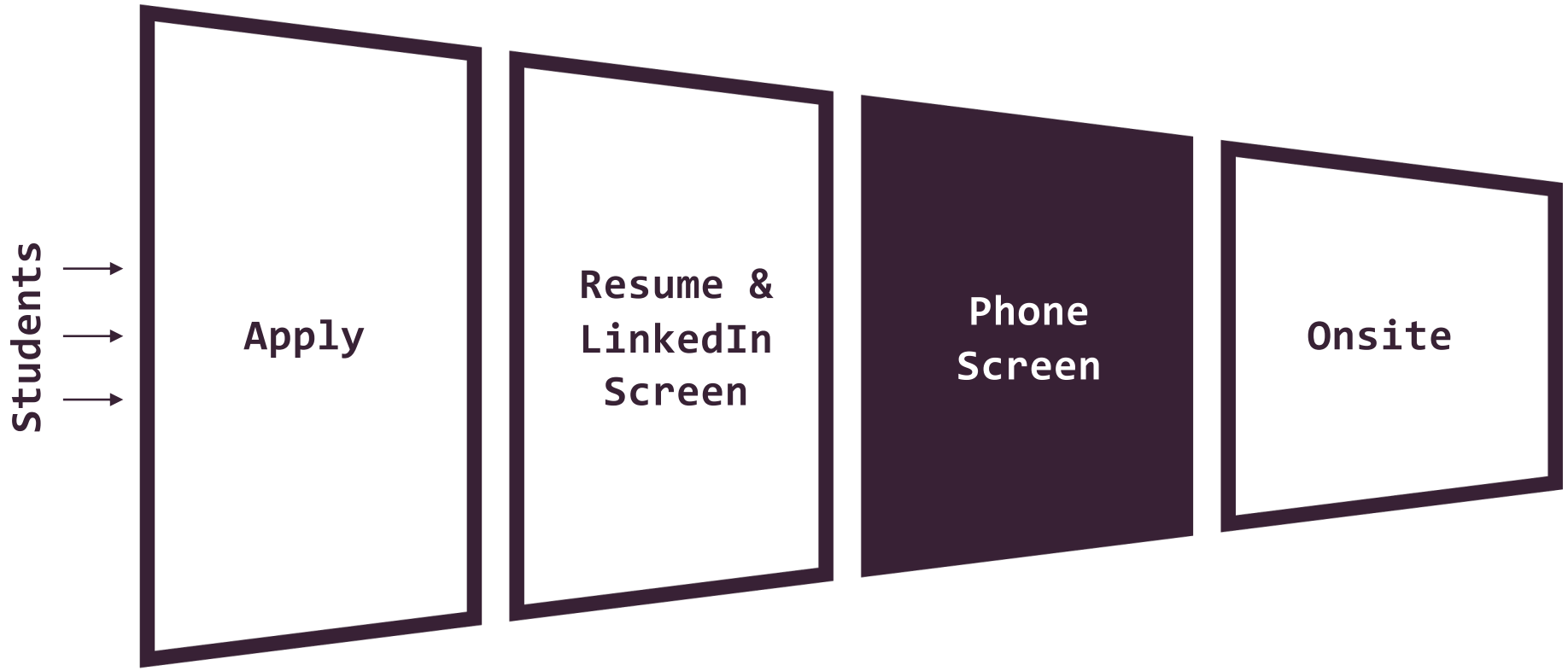
PROGRAMMING SKILLS

- **Languages**: Scala, Python, Javascript, C++, SQL, Java **Technologies**: AWS, Play, React, Kafka, GCE

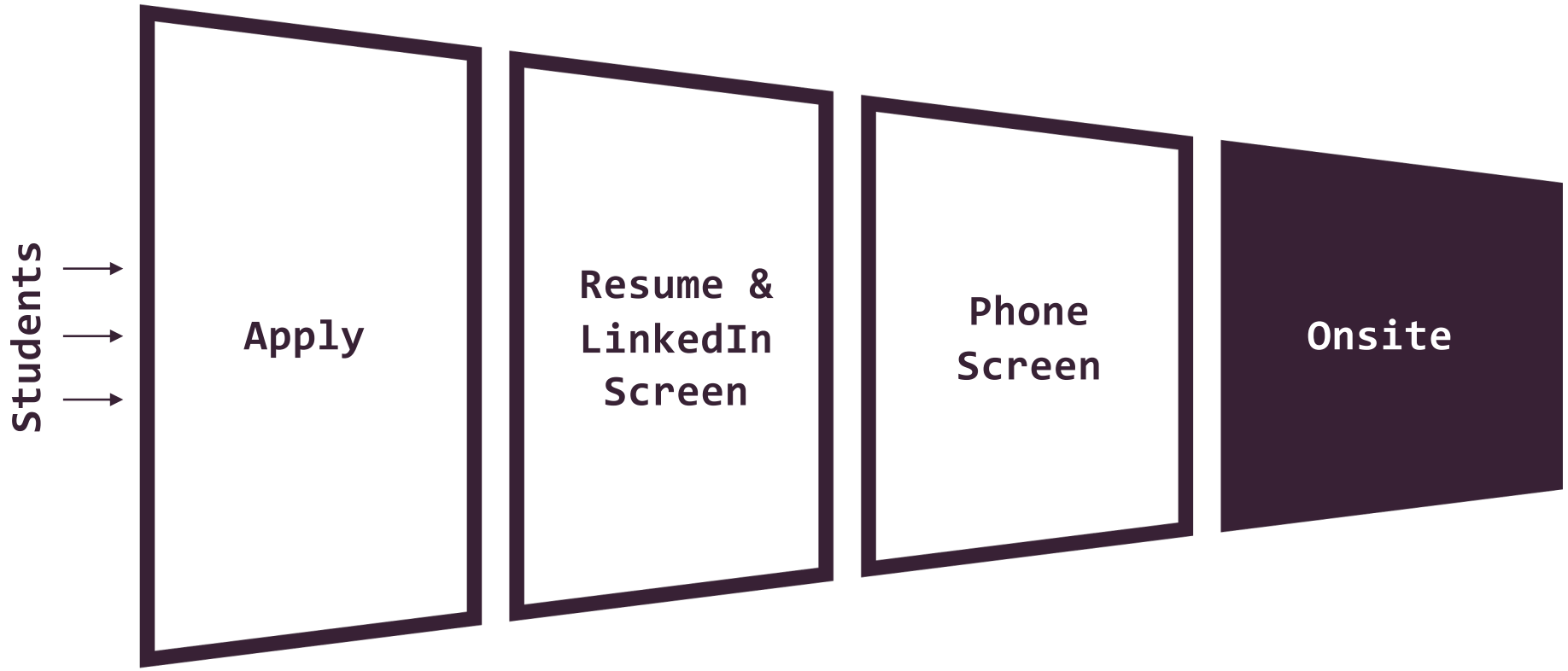
1. Prior tech internships
2. Big-name school
3. Past projects & Github

`The only thing you can control!`

How Tech Hires

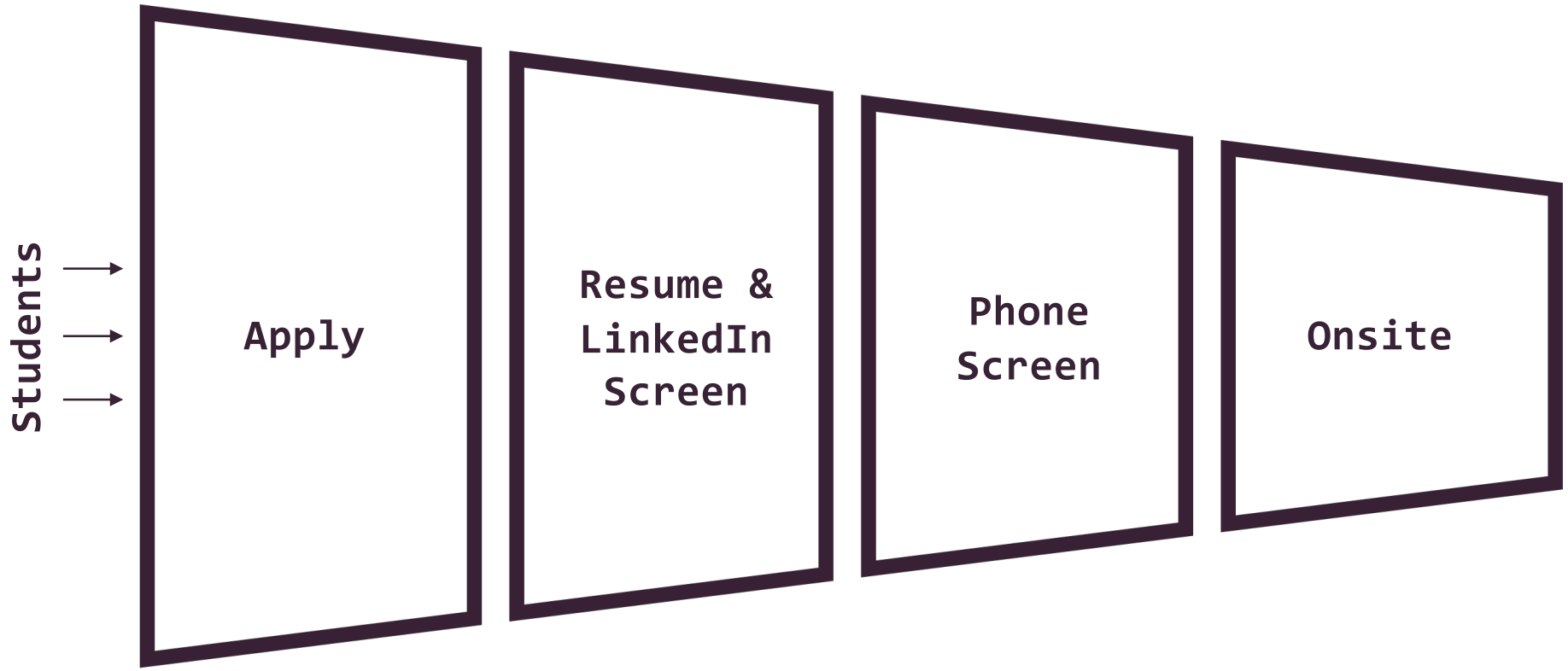


How Tech Hires

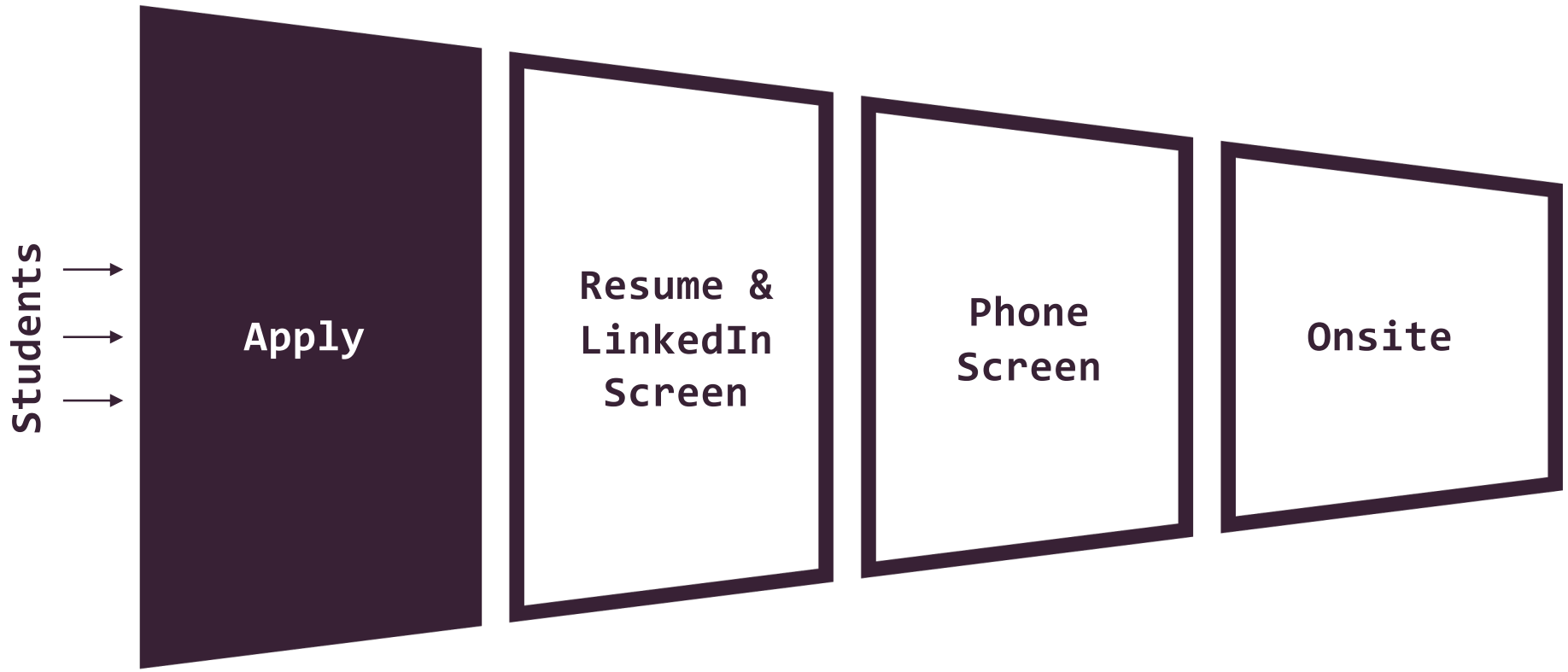


Student Support Needed

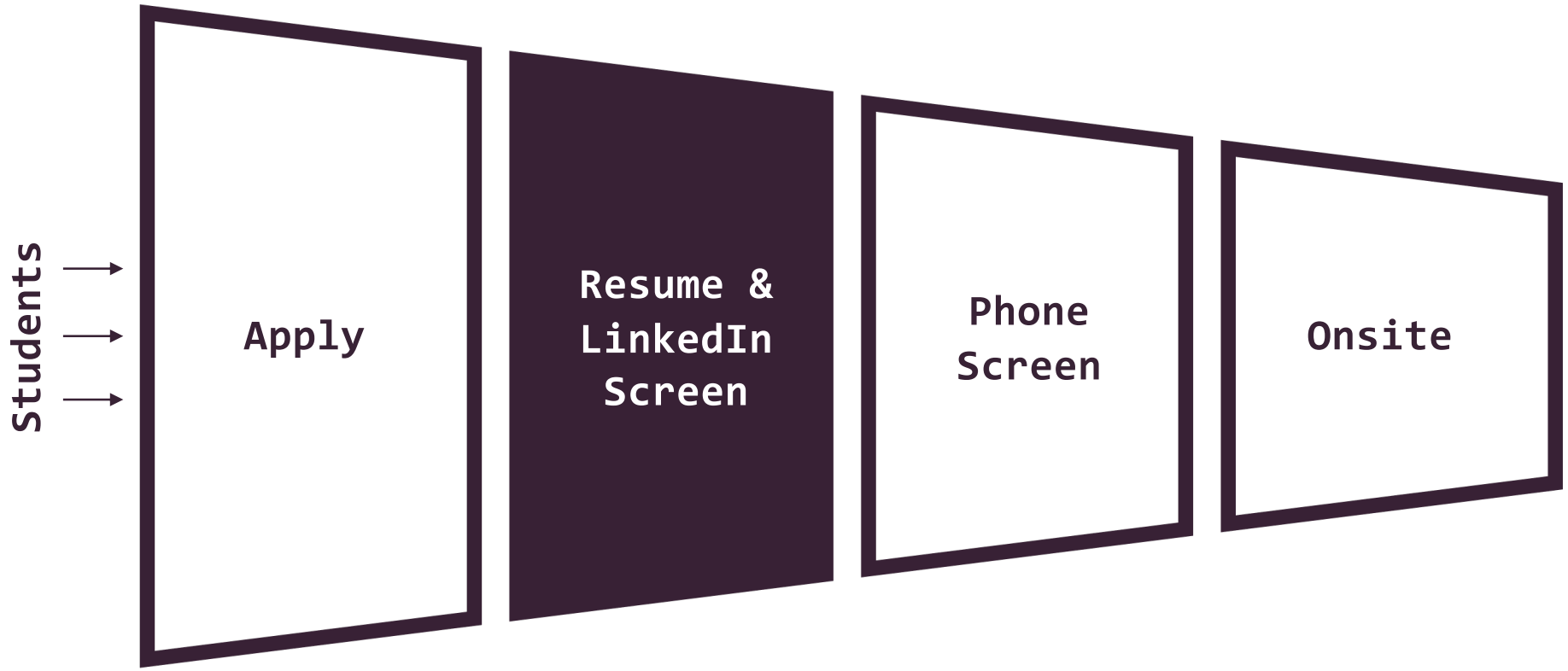
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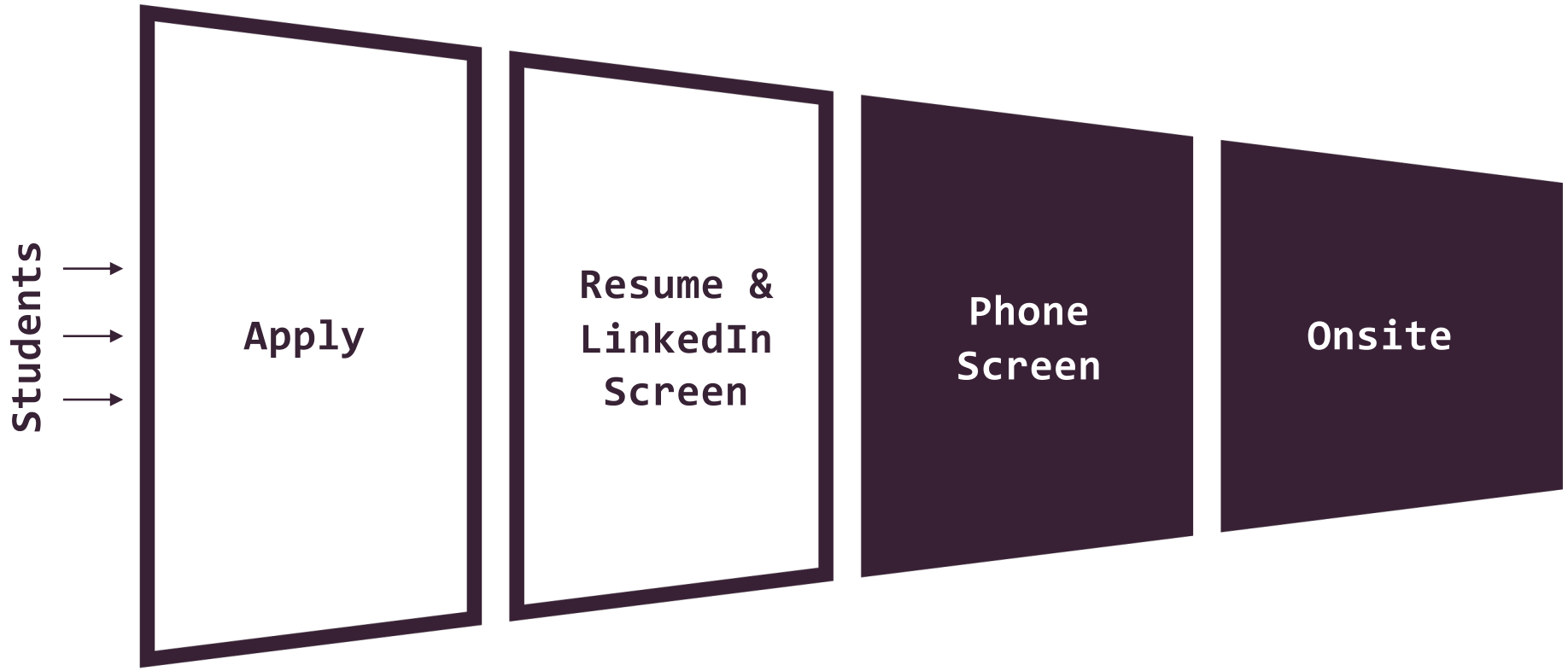
Student Support Needed



Student Support Needed



Student Support Needed



About CodeDay & MinT

MinT
mentors in tech

- Mentoring
- Workshops
- Capstone

CodeDay®

- Micro-Internships
- OSS Internships
- Interview Prep

About Our Mentors

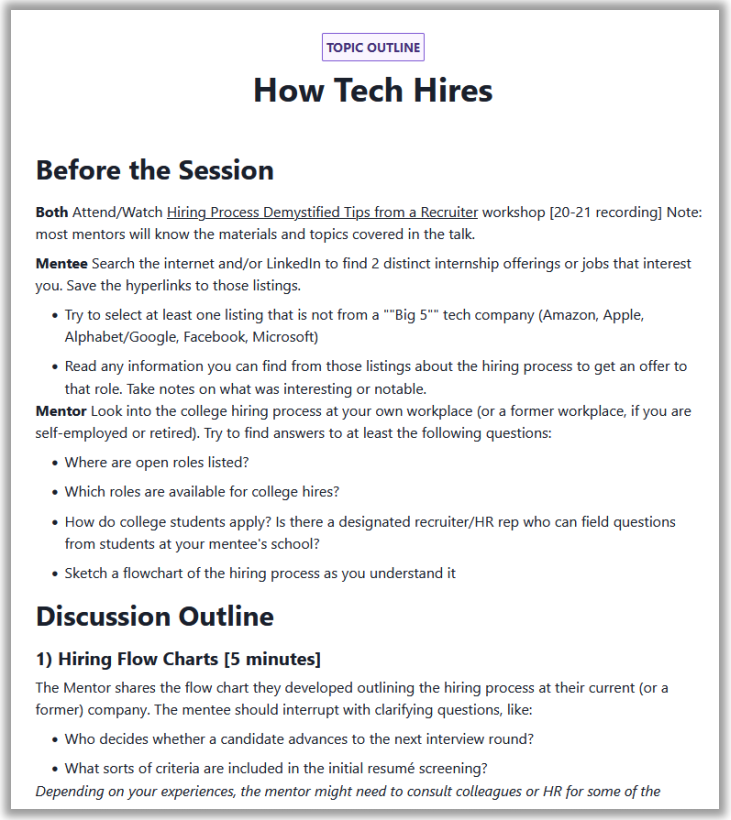
- 600+ mentors
- 8,500+ years of industry experience
- Average 14 years of industry experience

Our Programs

Increasing Applications

MinT mentors in tech

- Focused mentor meetings
- Workshops
- Application Tracking



TOPIC OUTLINE

How Tech Hires

Before the Session

Both Attend/Watch Hiring Process Demystified Tips from a Recruiter workshop [20-21 recording] Note: most mentors will know the materials and topics covered in the talk.

Mentee Search the internet and/or LinkedIn to find 2 distinct internship offerings or jobs that interest you. Save the hyperlinks to those listings.

- Try to select at least one listing that is not from a ""Big 5"" tech company (Amazon, Apple, Alphabet/Google, Facebook, Microsoft)
- Read any information you can find from those listings about the hiring process to get an offer to that role. Take notes on what was interesting or notable.

Mentor Look into the college hiring process at your own workplace (or a former workplace, if you are self-employed or retired). Try to find answers to at least the following questions:

- Where are open roles listed?
- Which roles are available for college hires?
- How do college students apply? Is there a designated recruiter/HR rep who can field questions from students at your mentee's school?
- Sketch a flowchart of the hiring process as you understand it

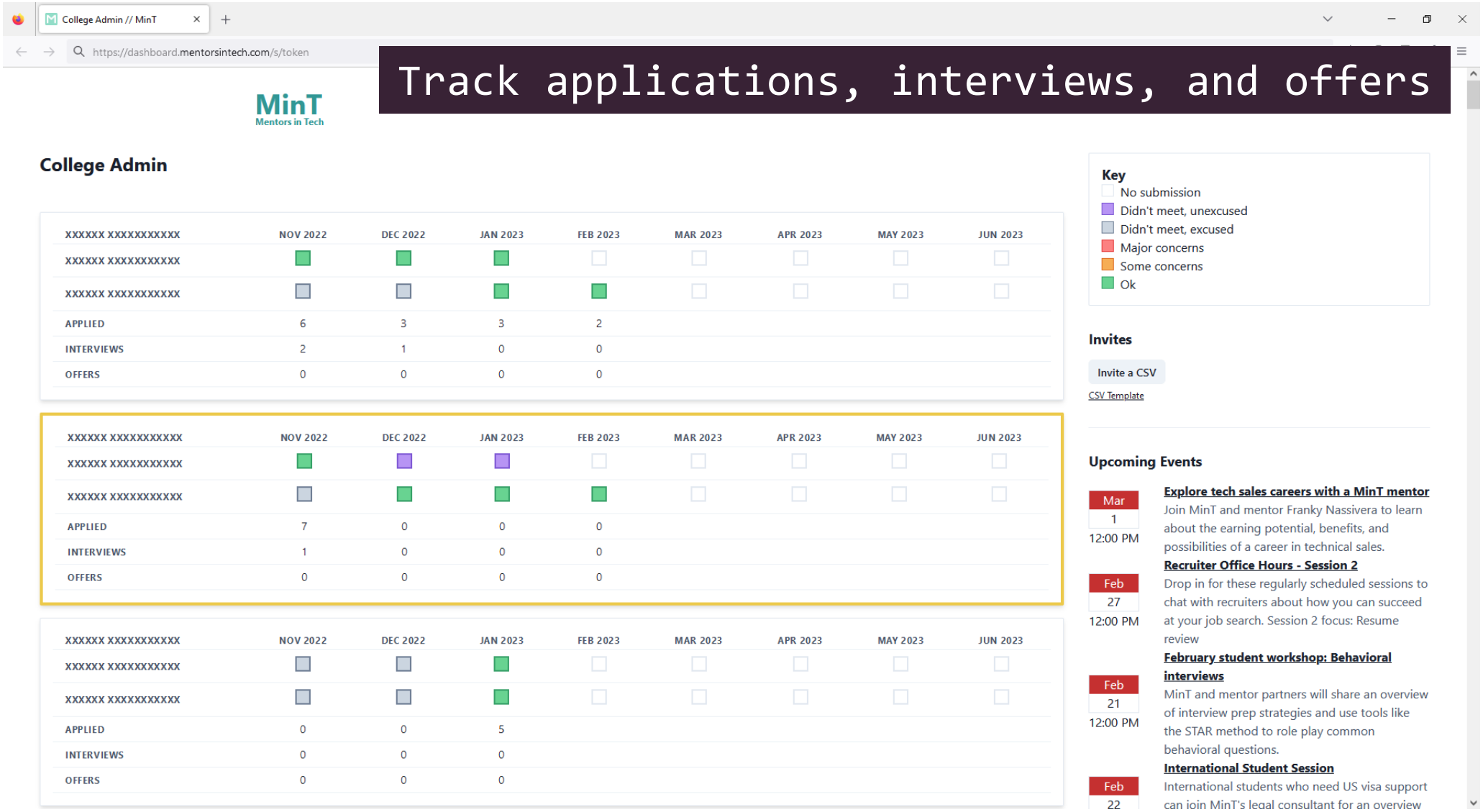
Discussion Outline

1) Hiring Flow Charts [5 minutes]

The Mentor shares the flow chart they developed outlining the hiring process at their current (or a former) company. The mentee should interrupt with clarifying questions, like:

- Who decides whether a candidate advances to the next interview round?
- What sorts of criteria are included in the initial resumé screening?

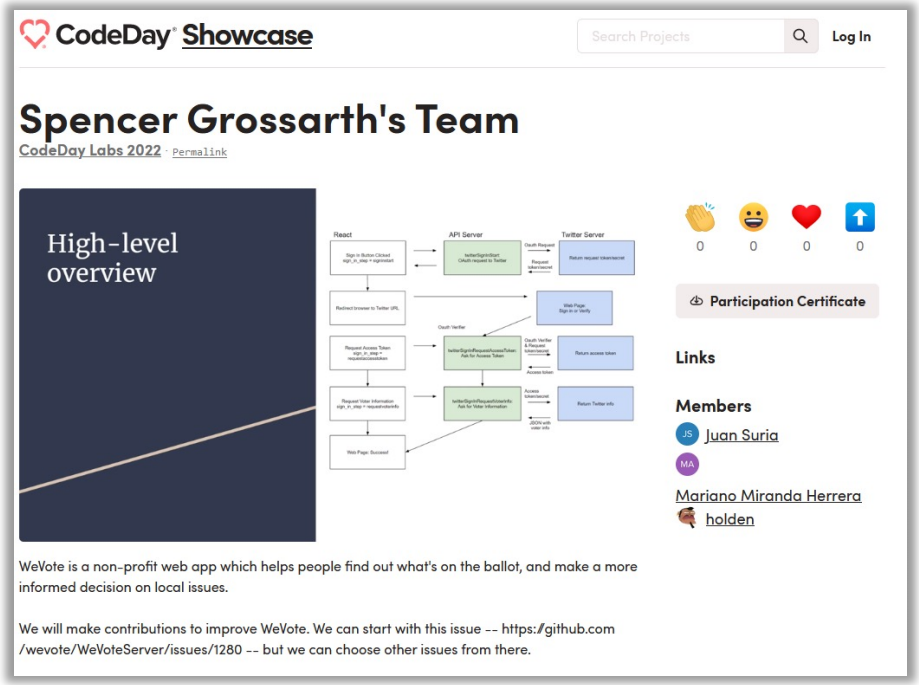
Depending on your experiences, the mentor might need to consult colleagues or HR for some of the


College Admin // MinT
https://dashboard.mentorsintech.com/s/token
Track applications, interviews, and offers
MinT
Mentors in Tech
College Admin
XXXXXX XXXXXXXXXX NOV 2022 DEC 2022 JAN 2023 FEB 2023 MAR 2023 APR 2023 MAY 2023 JUN 2023
XXXXXX XXXXXXXXXX
XXXXXX XXXXXXXXXX
APPLIED 6 3 3 2
INTERVIEWS 2 1 0 0
OFFERS 0 0 0 0
XXXXXX XXXXXXXXXX NOV 2022 DEC 2022 JAN 2023 FEB 2023 MAR 2023 APR 2023 MAY 2023 JUN 2023
XXXXXX XXXXXXXXXX
XXXXXX XXXXXXXXXX
APPLIED 7 0 0 0
INTERVIEWS 1 0 0 0
OFFERS 0 0 0 0
XXXXXX XXXXXXXXXX NOV 2022 DEC 2022 JAN 2023 FEB 2023 MAR 2023 APR 2023 MAY 2023 JUN 2023
XXXXXX XXXXXXXXXX
XXXXXX XXXXXXXXXX
APPLIED 0 0 5
INTERVIEWS 0 0 0
OFFERS 0 0 0
Key
No submission
Didn't meet, unexcused
Didn't meet, excused
Major concerns
Some concerns
Ok
Invites
Invite a CSV
CSV Template
Upcoming Events
Mar 1 12:00 PM
Explore tech sales careers with a MinT mentor
Join MinT and mentor Franky Nassivera to learn about the earning potential, benefits, and possibilities of a career in technical sales.
Feb 27 12:00 PM
Recruiter Office Hours - Session 2
Drop in for these regularly scheduled sessions to chat with recruiters about how you can succeed at your job search. Session 2 focus: Resume review
Feb 21 12:00 PM
February student workshop: Behavioral interviews
MinT and mentor partners will share an overview of interview prep strategies and use tools like the STAR method to role play common behavioral questions.
Feb 22
International Student Session
International students who need US visa support can join MinT's legal consultant for an overview

Hands-On Experience

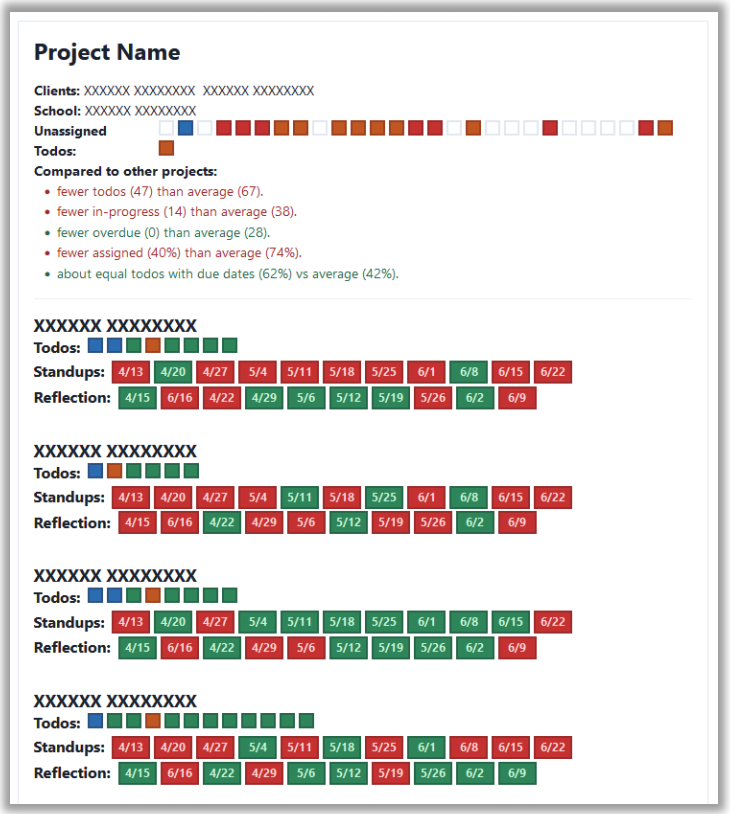
CodeDay®

- Micro-Internships (4wk during year)
- CodeDay Labs (6-12wk summer)



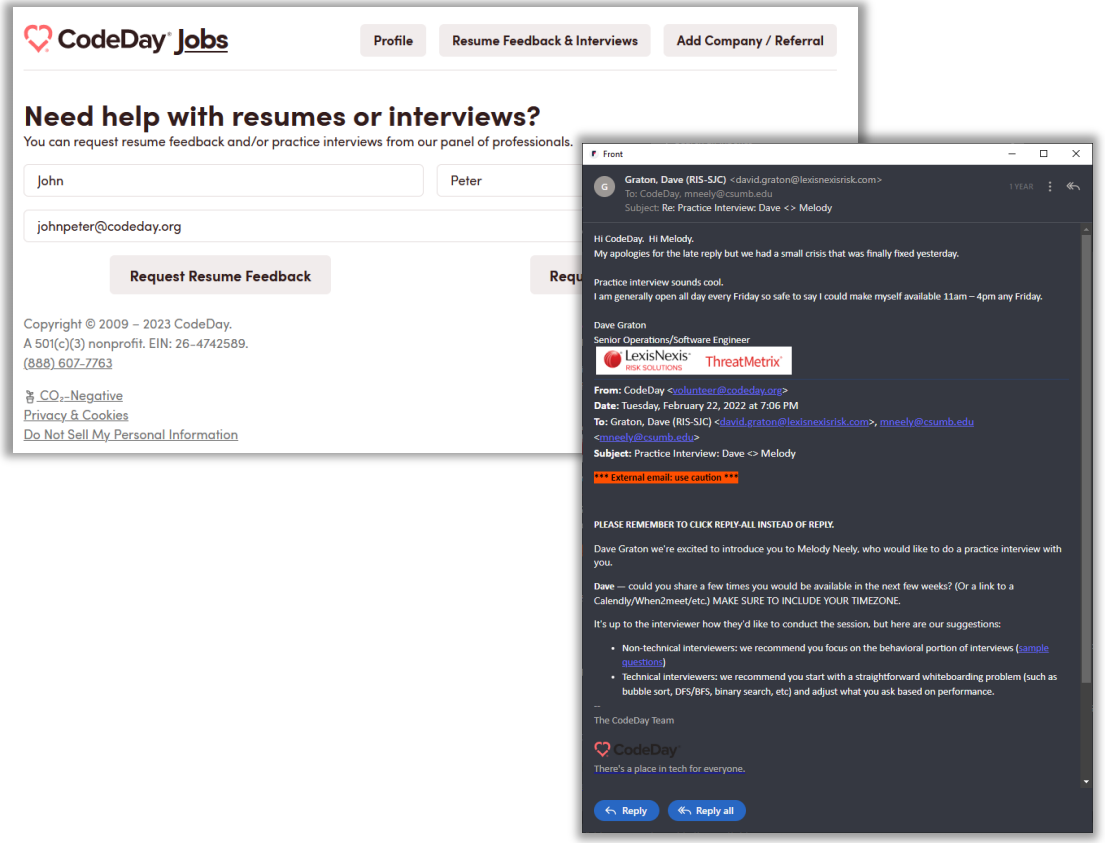
Hands-On Experience

- Capstone



Interview Prep

- Schedule Mock Technical/HR Interviews



Interview Prep

MinT
mentors in tech

- Practice interviews with mentors
- Workshops



TOPIC OUTLINE

Tech Interviews

About Interviews

MinT has received clear input from students and schools that students in the program would like to practice their technical interviewing skills. We suggest that each Mentor/Mentee pair complete 2 Mock Interviews during their scheduled monthly calls, one in January and one in February. As always, pairs should feel free to reschedule or reprioritize based on the student's needs and timeline. For instance, if the student won't be interviewing until the summer, consider postponing one or both modules.

By performing 2 mock interviews with each of their mentors, students can get 4 opportunities to practice.

We've provided this single outline to organize your technical interviews.

Before the Session

Mentors and Mentees

- Read this outline in its entirely
- attend/watch the Technical Interviewing Workshop [optional for mentors]
- Have pen and paper, or a digital whiteboard app, available for your session

Mentors

- Consult the "Interview Questions" document available for Mentors only from the Resources list on the MinT Dashboard and select 1-2 questions to ask during your mock interview.

About Technical Interviews

Kinds of interviews

Technical Interviews generally fall into two broad types: **Screening** and **Full**.

Screening interviews are often held as 30-minute phone calls or video chats, and are usually led by a recruiter in order to determine whether you are a strong enough candidate to bring to a round of full

Results


Husrav
MIIT Memes
trying to chase that 'American Dream,'
as people call it.

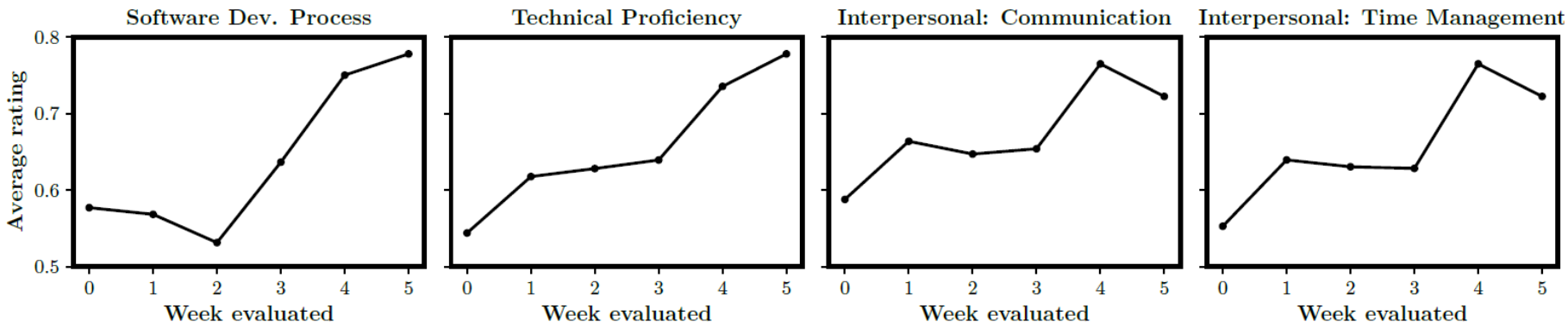

Ben

MinT Mentoring Stats

- 4,599 applications
- 359 interviews
- 81 offers

CodeDay Labs Stats

- 25-point increase to mentor employability eval
- 12-point increase to new grad jobs



Questions?

- CodeDay: tyler@codeday.org
- MinT: kevin@mentorsintech.com
- Green River: khang@greenriver.edu