# Scaling Your Engineering Career

Virtual panel with Insight Data Engineering alumni

#### Agenda

- Overview of Insight
- Insight Data Engineering Alumni Intro and Discussion
- Q&A

#### Who is this session intended to help

Programmers who want an overview on the Insight Data Engineering Program

#### Who is this session not intended to help

- Applicants who want to learn how to code
- Applicants who have specific questions about the Coding Challenge
- Applicants who want more information on how to do well on the data science, health data science, artificial
  intelligence, devops engineering, decentralized consensus, security fellowship process (Please check out the
  Bridge the Gap series for those programs)

#### **Overview of Insight**

- 7-week fellowship training programs designed to help people transition into new roles
- Started with data science but has since expanded to data engineering, devops engineering, health data science, decentralized consensus (blockchain) and security
- Applications at http://apply.insightdatascience.com



#### What is Insight Data Engineering?

- Intensive 7 week full-time project-based training
- Need-based scholarships available
- No education requirement
- Build scalable, distributed data pipelines
- Self-directed collaborative learning, no classes

#### **Data engineering**

Software engineering with a specialization in data. Focuses on backend processing with an attention to data quality, storage, process efficiency and optimization

#### Who'd be good for it:

- You enjoy coding business logic and dealing with data but also making sure the process is performant
- You have interest in data science but your speciality is around the software engineering aspects of it
- You care about data and you're adept at handling large datasets





Take programmers, provide them with an environment to strengthen and showcase their skills, expose them to interesting companies that are hiring and help prepare them for interviews

#### INSIGHT IN A NUTSHELL



#### Weekly breakdown of Insight process

- 1
- Introduction to program and high-level concepts in data engineering
- Fellows identify projects to work on at Insight and get cloud computing environment set-up.

- 2-4
- Fellows work on their projects
- Hiring managers from Insight's partner companies visit and meet with Fellows, chat about team, culture, values, open roles, desired skills and experiences

- 5-7
- Fellows visit mentor companies and present completed projects (demo roadshow continues past Week 7)
- Fellows participate in mock interviews and help each other prepare for interviews.

- 8+
- Fellows start interview process at mentor companies
- Introductions, via demos and resumes, to new companies continue.

#### **Admissions process**

- 1. Apply at https://apply.insightdatascience.com/apply/programs
- 2. Coding challenge with a week to complete
- 3. One or more 15-30 minute remote interviews
- 4. Decision

#### So you want to be a data engineer...

Data engineering is software engineering with a speciality in data

To be a good data engineer, you also must demonstrate that you can be a good software engineer

- You know how to code
- You can solve problems using code
- You can contribute production-quality code

### What does the Insight DE coding challenge test for?

- Can read a problem statement, understand it and solve using code
- Knowledge of basic data structures
- Able to write clean, modular code using software best practices
  - Readable, modular
  - Tested
- Knowledge of Linux and basic command-line
- Esmiliarity of version control tools (i.e. sit)

#### What do Data Engineers do?

- Develop, construct, test and maintain architectures for big data
- Align architecture with business requirements
- Data acquisition
- Develop data set processes
- Identify ways to improve data reliability, efficiency, and quality
- Use large data sets to address business issues
- Deploy sophisticated analytics programs, machine learning and statistical methods
- Prepare data for predictive and prescriptive modeling
- Use data to discover tasks that can be automated

Alumni presentations

## Hear from past Fellows speak of their experiences

#### **Alumni**

Michal and Alex attended the Insight Data Engineering program last year and are both based in Los Angeles



