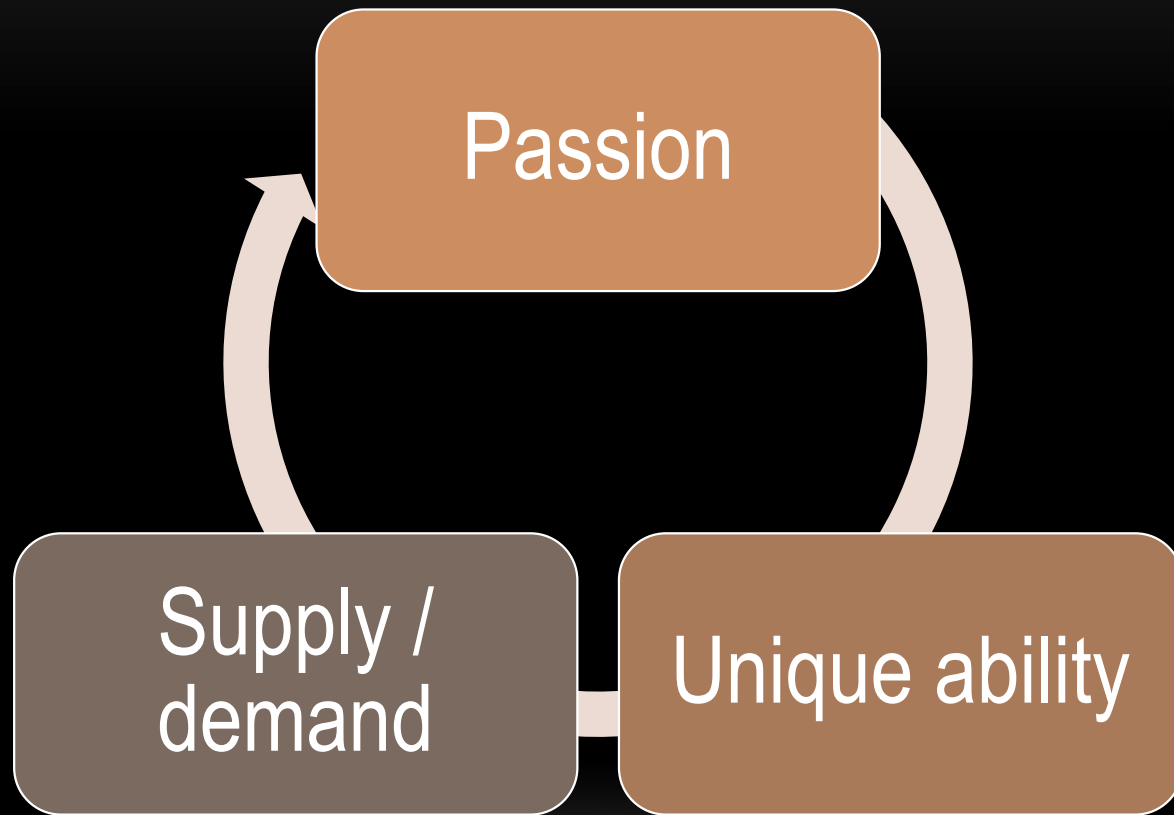


DATASCI IN FINANCE

Norman Niemer

<http://tiny.cc/datasci-finance>

VIRTUOUS CIRCLE



MY BACKGROUND

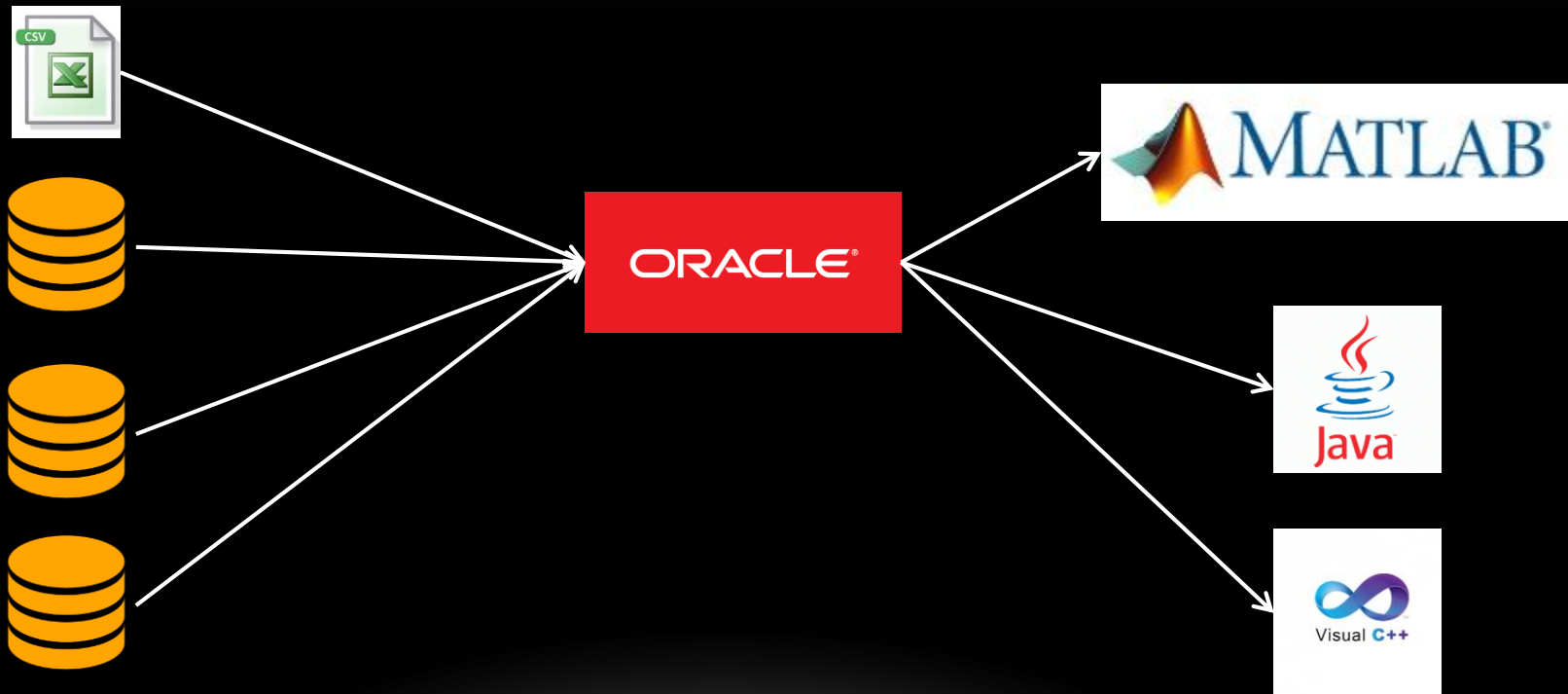
- Early 10s: computer games+admin, coding
 - Late 10s: tech entrepreneur
 - Early 20s: finance, M&A
 - Late 20s: data-driven investment research
 - Early 30s: data science
-

WHAT WE DO

- Value add:
 - Behavioral analytics
 - Alpha generation
 - Portfolio/Risk management
 - Biz dev
 - School Subjects Used: coding, optimization, machine learning, stats/econometrics
 - Subjects not learned in school: (software) engineering, portfolio management, investments / markets (CFA), company/market valuation (CFA), AI, marketing/sales
-

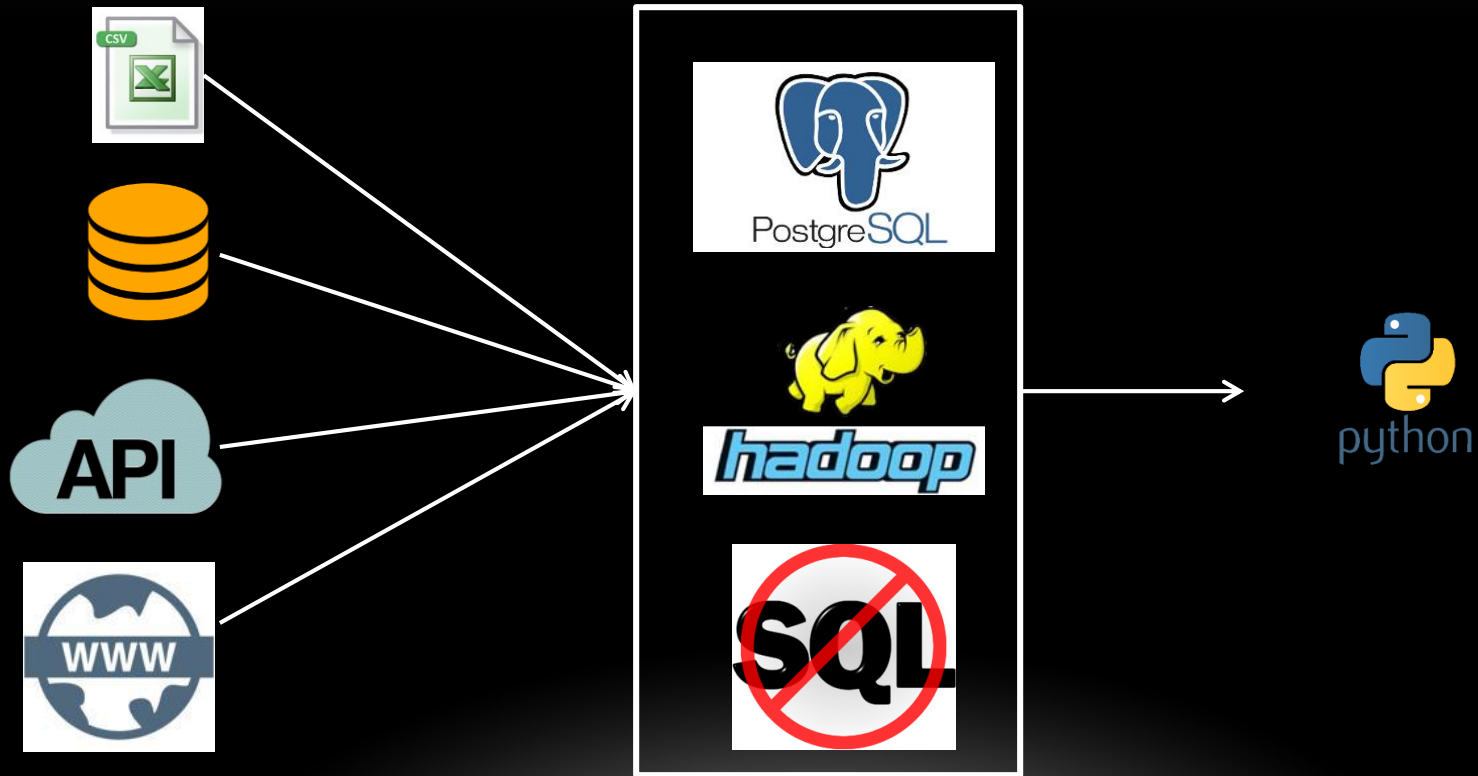
HOW WE DO IT

- Reference: Quant stack



HOW WE DO IT

- Datascience stack



HOW WE DO IT

- Datascience stack details

<https://github.com/citynorman/datasci-finance/blob/master/references.ipynb>

INTERVIEW PROCESS

- 15mins phone screen
 - Complete coding test
 - 30mins with team members
 - Work on creative project
 - Present project and 30mins with senior managers
-

CODING TEST

- Pandas munging (ETL): indexing, altering
 - Pandas computations: grouping, rolling apply
 - Linux CLI
 - SQL
 - Stats: time series modeling
 - Machine learning: CV, RF
 - Portfolio Optimization
 - Bonus: hadoop spark
-

CODING PREP

- <https://github.com/citynorman/datasci-finance/blob/master/pandas.ipynb>

DATASCI BEYOND FINANCE

- Virtual (shopping) assistants (Techcrunch, Mastercard)
 - VR (Stamford innovation center)
 - Expertise finding (Fintech #2)
 - Document tracking (Fintech #1)
 - Robotics for kids
 - Open source portfolio management
-

DATASCI FRONTIER

- <https://github.com/citynorman/datasci-finance/blob/master/references.ipynb>