



Real-time Labor Market Analysis of Growing Demand for Coding Skills

August 15, 2016

Burning Glass: Our Mission and Services

1. We help **learners and workers** move into and up within their careers
2. We help **academic institutions and learning companies** identify, develop, and articulate the value of programs and content
3. We help **employers** fulfill and plan for their talent needs
4. We deliver high value job market research and **thought leadership**



We assemble raw data and drive it to practical insight

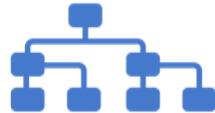
Our core big data engine aggregates job market data, analyzes job market patterns, and delivers actionable insight



Drawing conclusions

Our advanced AI engine leverages this common vocabulary to conduct sophisticated pattern analysis, providing granular insight into skills in demand and real-life career transitions.

Translating to a common language



A proprietary taxonomy allows those across the job market to communicate. Our natural language artificial intelligence translates disparate terminology into a common language of jobs, skills, and qualifications, paving the way for valid comparisons.



Tagging and structuring

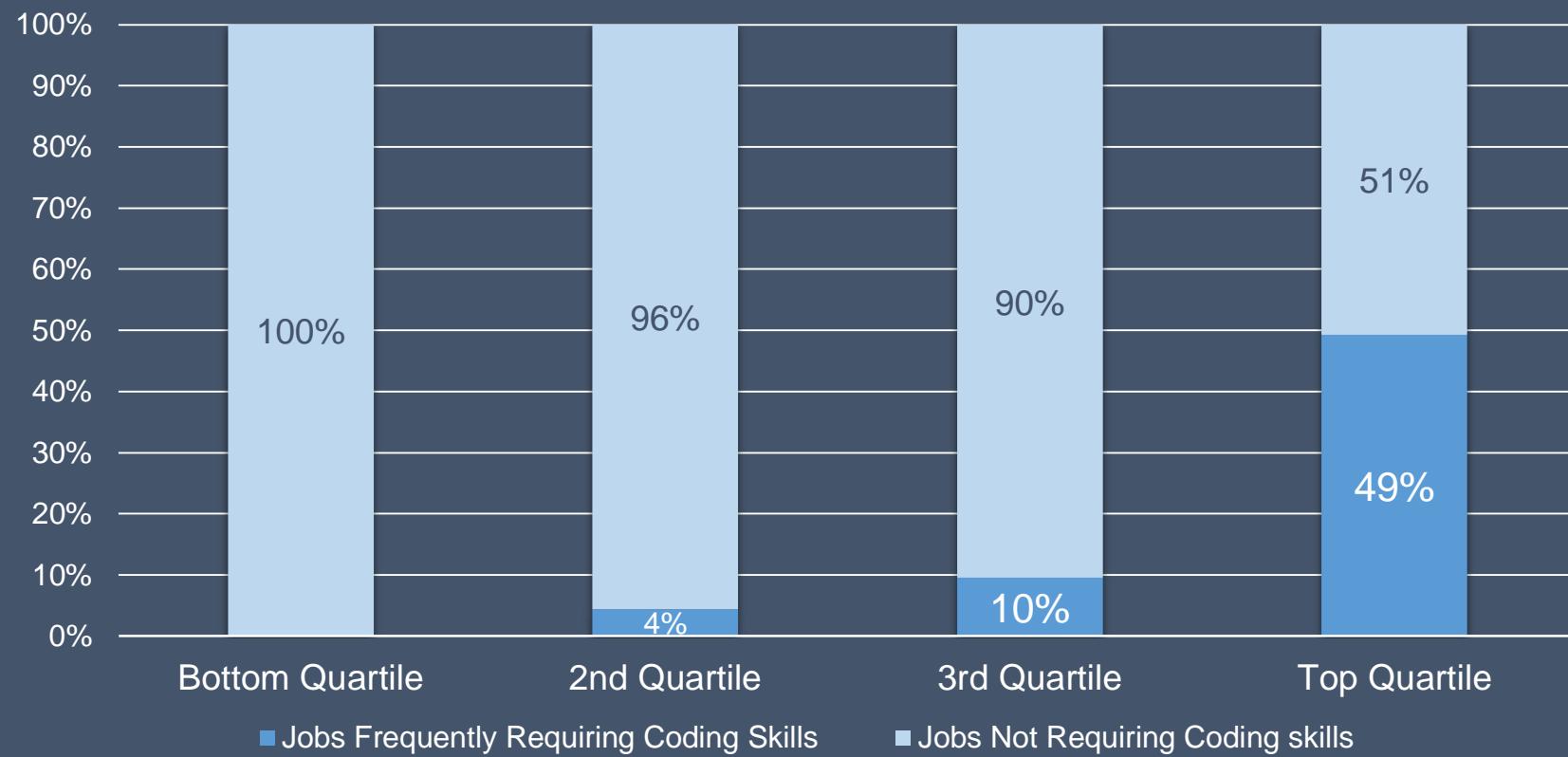
We add a common structure of metadata across all the elements in this data warehouse, covering more than 70 elements to permit in-depth analysis.

Capturing job market data

We scan 40,000 sources daily, capturing job postings from job boards, corporate sites, and other sources, along with a vast store of resumes. We track 5.4 million active, unique job openings.

CODING IS BECOMING THE KEY TO HIGH PAYING CAREERS – NOT JUST IN TECH

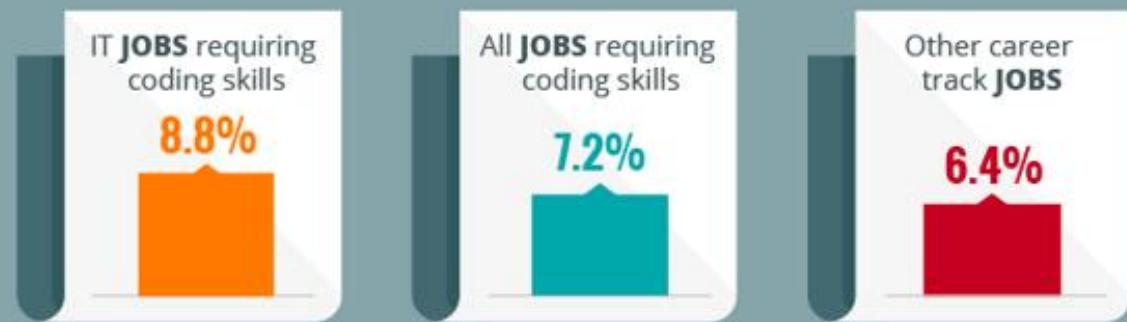
Jobs and Coding Skills by Income Level



JOBS REQUIRING CODING SKILLS GROWING FASTER THAN OTHER CAREER-TRACK JOBS

**CODING JOBS
ARE GROWING
FASTER**

Coding jobs are projected to grow faster than other jobs over the **next 10 years**:



SCIENCE

Scientists use computer programming to analyze the results of their experiments.



CODING JOBS ARE AVAILABLE ACROSS MANY CAREERS

INFORMATION TECHNOLOGY

IT professionals write software that is used for everything from creating apps to driving cars.



ENGINEERING

Engineers use programming to design and test new products and conduct research.



DATA ANALYST

Data analysts use computer programming to analyze data and solve problems in business and finance.

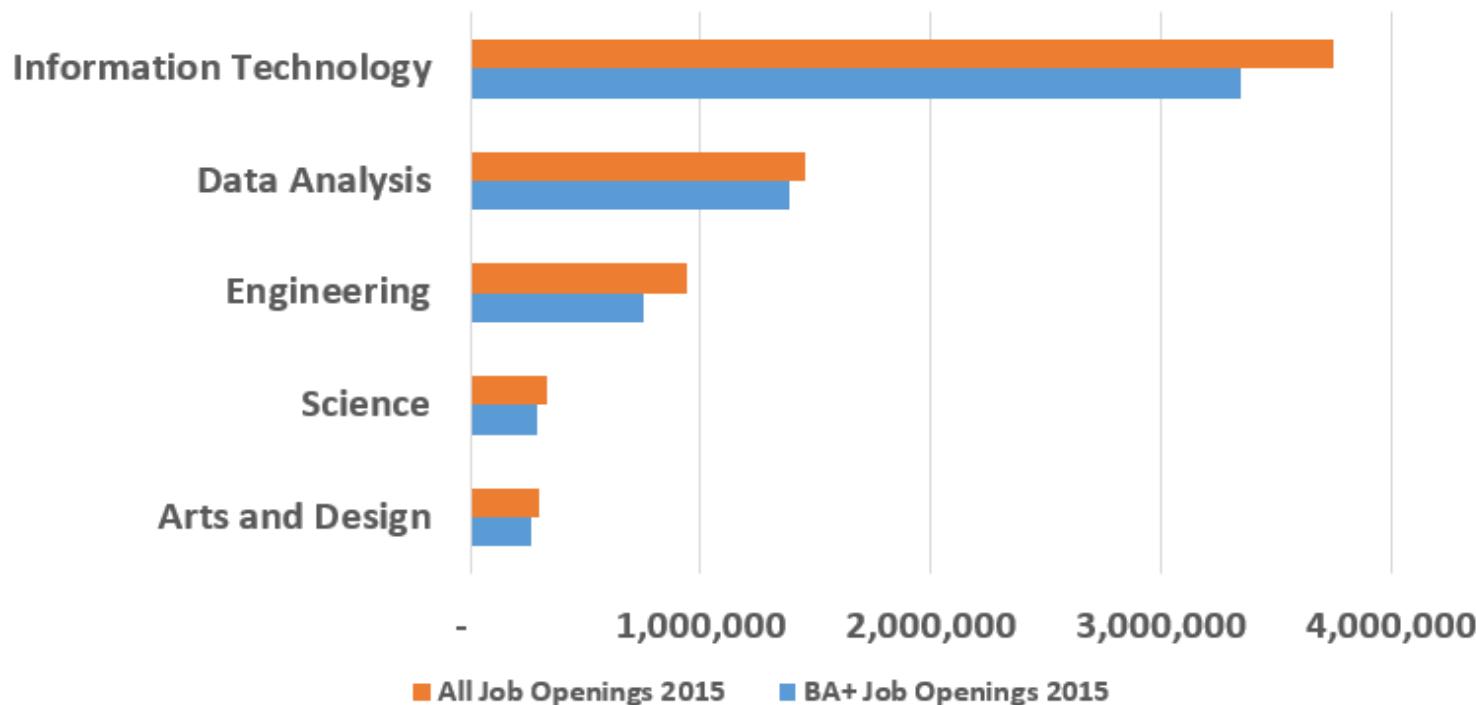


ARTS AND DESIGN

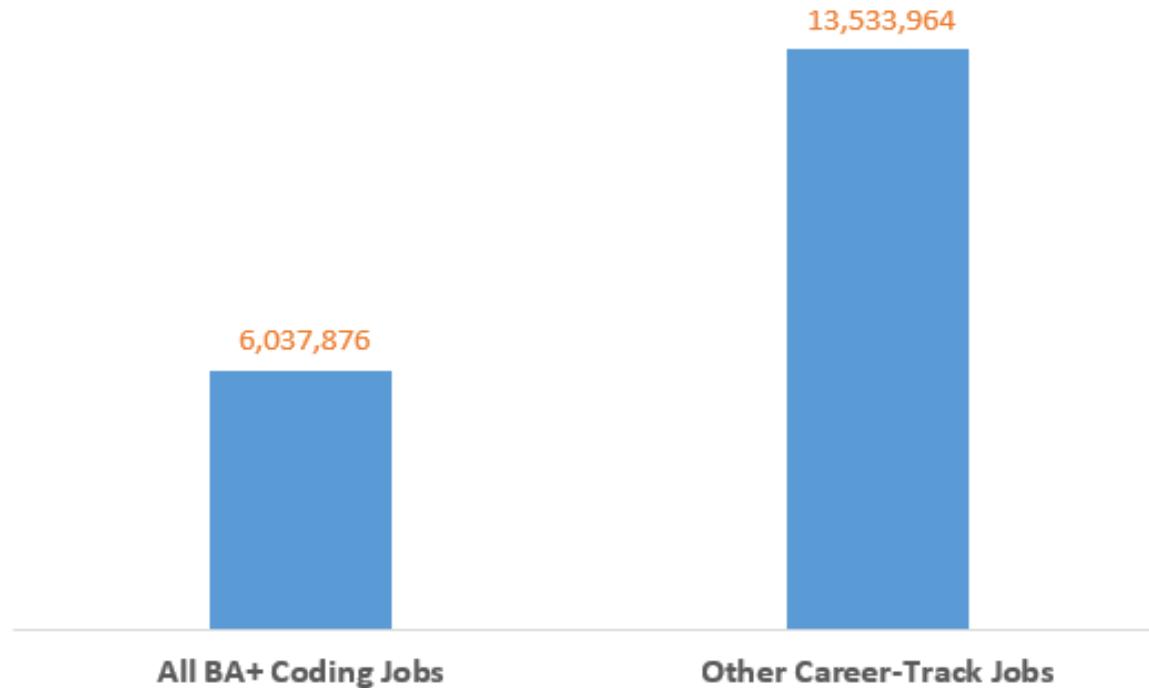
Designers use digital tools to create websites and design the physical products we buy.

CODING SKILLS IN DEMAND ACROSS SEVERAL CAREER AREAS

45% OF JOBS REQUIRING CODING SKILLS NOT IN TRADITIONAL IT OCCUPATIONS



31% OF ALL BA+ JOB OPENINGS IN 2015 REQUIRE CODING SKILLS



CODING SKILL REQUIREMENTS IN EACH JOB GROUP

Importance of Programming Skills:

Very High

High

Moderate

Low

INFORMATION TECHNOLOGY

General Programming Languages

- Java, C++

Database & Business Intelligence

- SQL, Oracle

Web Development

- Javascript

Data Science

- Hadoop, NoSQL, R

DATA ANALYSIS

Data Management

- Excel including Visual Basic and Macros

Database & Business Intelligence

- SQL, Oracle

Data Science

- Hadoop, NoSQL, R

ENGINEERING

Engineering Design

- Computer Aided Design

Computer Aided Manufacturing

- Programmable logic Controllers, Computer Numerical Control machines

General Programming Languages

- C++, Java

ARTS & DESIGN

Design Software

- Photoshop

Web Development

- Javascript, HTML5

SCIENCE

Statistical software

- SAS, R

Mathematical Computing

- Python, C++

TOP OCCUPATION GROUPS IN DEMAND

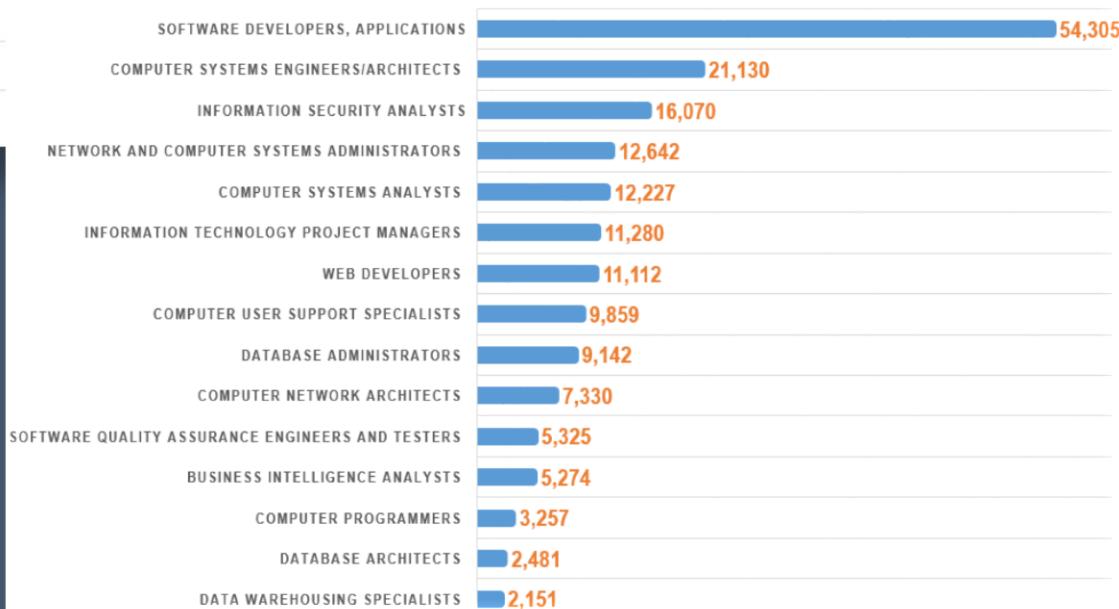
(JOB POSTING COUNTS AUG. 2015 – JULY 2016)



TOP 15 COMPUTER OCCUPATIONS NATIONALLY



TOP 15 COMPUTER OCCUPATIONS IN THE DC METRO AREA



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