SJSU SAN JOSÉ STATE UNIVERSITY

Career and Workforce Preparation
SJSU Career Center
Career and Workforce Preparation

- Regional economy snapshot
- Talent acquisition and development
- Factors in career readiness
- SJSU trends in business, engineering and science employment
- SJSU career dev resource
From California EDD and Silicon Valley Index, 2016:

**Low Unemployment**
- 4.1% in San Jose/Santa Clara Metro
- 5.6% in CA
- 4% = full employment

**Income on the Rise**
- Median household income - $99K
- Low childhood poverty – 8.9%
Regional Economy – The Bad

From Silicon Valley Index, 2016:

The Bad

Inequality –
- $78K diff. between highest and lowest ed levels
- $43K diff. between White and Hispanic/Latin@ residents
- Trend for decline in share of mid-skill, mid-wage jobs

Brookings Institute Report (Hershbein, 2016)

A college degree is worth (50%) less if you were raised poor
Growing Industries
• Professional and business services, e.g., accounting, law (+15,500)
• Scientific and technical services, e.g., IT, engineering consulting (+8,300)

Declining Industries
• Manufacturing (-1,100)

Top Startup Industries:
• Technology (68%)
• Healthcare (15%)

Sources:
• Silicon Valley Bank Innovation Economy Outlook 2016
• Employment Development Department August 2016 Indicators
IT Trends From Gartner Hype Cycle Report, 2016

• **Platform ecosystem**
  Connected devices that support operations

• **Smart machine technologies**
  Machine-learning from data

• **Immersive experiences**
  Human-centric technologies
Biomedical Trends from the Medical Futurist, 2016

- **Diagnostic and support clothing**
  Fibertronics, wearable and connected health tools

- **Artificial intelligence diagnosis**
  Artificial intelligence in diagnosis, e.g. x-ray readings

- **3D bioprinting**
  e.g., Liver tissue
Diversity Challenge

- 9% of SV company exec. officers are women (Fenwick & West LLP, 2015)
- 6% of tech workers are black, latin@ (KQED California Report, 2016)

Gig Economy Reality

- Defn.: contingent work that is transacted on a digital marketplace
- Share of persons holding multiple jobs: 4.8% in 2015 (U.S. GAO, 2015)
Workforce planning for diversity and other needs

STEM skill gap – myth or reality?
• HBR, 2014 – it’s real
• HBR, 2016 – it’s due to below market salary and lack of training offered by employers

Talent development
• Role of higher education
• Training/certification providers

Talent analytics
• Recruiting
• Retention
Employers Want . . .

<table>
<thead>
<tr>
<th>Top attributes requested on resumes</th>
<th>% of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leadership</td>
<td>80.1%</td>
</tr>
<tr>
<td>Ability to work in a team</td>
<td>78.9%</td>
</tr>
<tr>
<td>Communication skills (written)</td>
<td>70.2%</td>
</tr>
<tr>
<td>Problem-solving skills</td>
<td>70.2%</td>
</tr>
<tr>
<td>Communication skills (verbal)</td>
<td>68.9%</td>
</tr>
</tbody>
</table>

Source: *Job Outlook 2016*, National Association of Colleges and Employers
### Employers Want . . .

<table>
<thead>
<tr>
<th>Attribute</th>
<th>2016 Average Influence Rating</th>
<th>2015 Average Influence Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major</td>
<td>4.0</td>
<td>3.9</td>
</tr>
<tr>
<td>Has held leadership position</td>
<td>3.9</td>
<td>3.9</td>
</tr>
<tr>
<td>Has been involved in extracurricular activities (clubs, sports, student government, etc.)</td>
<td>3.6</td>
<td>3.6</td>
</tr>
<tr>
<td>High GPA (3.0 or above)</td>
<td>3.5</td>
<td>3.6</td>
</tr>
<tr>
<td>School attended</td>
<td>2.9</td>
<td>2.8</td>
</tr>
</tbody>
</table>

Source: *Job Outlook 2016*, National Association of Colleges and Employers
Factors in Career Readiness

Analytics-driven job search

- Curate online presence
- Branding and key words
- Explore career paths and associated training
- Find network and mentoring connections
- Find opportunities:
  - passive channels
  - active channels
Factors in Career Readiness

Other advice for students:

- Start with a sense of interests
- Prototype your career – try, reflect, adjust, try, reflect, adjust . . .
- Build total package: STEAM, business, social skills
- Explore related fields
- Seek internships
- Seek rotational career roles
Science Jobs in SpartaJobs

- Product Marketing Science Manager
- Research Assistant
- Process Improvement Scientist
- Data Scientist (Statistician)
- Biostatistician
- Lab Assistant
- Associate Chemist

Main Industry: Biotechnology
Engineering Jobs in SpartaJobs

- Software Developer
- Hardware Engineer (power and performance modeling)
- Network Engineer
- Sales Engineer
- IT Business Analyst/Project Manager
- Cybersecurity Engineer
- Transportation Engineer
- Structural Engineer
- Environmental Engineer

Wide Range of Industries
Business Jobs in SpartaJobs

- Account Manager
- Customer Success Representative
- Corporate Staff Accountant
- Financial Analyst
- Operations Coordinator
- Project Manager
- Business Analyst
- Recruiting Coordinator
- Marketing Associate
- Market Research Analyst
Find the SJSU Career Plan at www.sjsu.edu/careercenter
Features

- Checklist by phase
- Live links to resources
- Small steps of career prototyping
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Catherine Voss Plaxton
M.A. Ed., M.A., PPSC
Director, Career Center

Nellie Rochon-Ellis, M.A.
Employment Specialist
College of Science
College of Applied Sciences and Arts

John Salangsang, M.A.
Employment Specialist
College of Business

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