

# CAREER SERVICES

## University of Pennsylvania

### School of Engineering & Applied Science

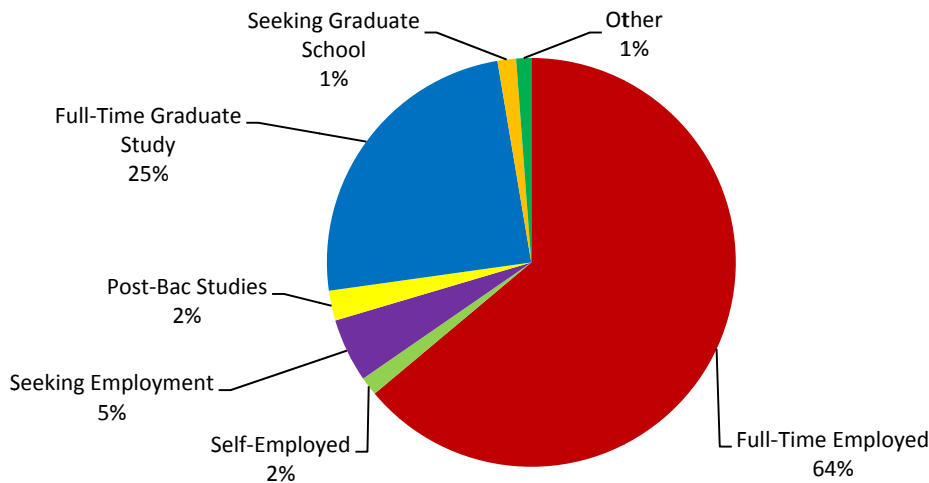
## Undergraduate Career Plans Survey Report 2010-2011

### Overview

Each year Career Services surveys the SEAS graduating class to gather information about their post-graduation plans. This report summarizes the responses from December 2010, May and August 2011 SEAS BSE and BAS degree recipients. The school awarded 358 undergraduate degrees. Career Services received 341 responses, which represents a 95% response rate. Of those students reporting the date they received their offer, over 94% were offered employment prior to graduation, which was a 6% increase over last year. The top industries in which graduates accepted positions continue to be consulting (a 4% increase), manufacturing (a 4% decrease), technology (a 6% increase) and financial services. The overall average salary of the employed respondents was \$68,814, which was \$6400 more than the previous year's class. Average salaries increased in every major. Students had an average of 2 job offers and nearly 64% accepted positions in the Mid-Atlantic or Northeast regions, a 4% decrease over last year, reflecting their willingness to relocate for the position. Of those going to graduate school, 65% are pursuing a degree in engineering (similar to the Class of 2010), 13% are pursuing degrees in medicine or dentistry and 6% in business.

Prepared by Rosette Pyne, Senior Associate Director  
 Robert Gannone, Administrative Assistant  
 December 2011

**Post-Graduation Plans**



### METHODOLOGY

Engineering students graduating with either a BAS or BSE degree in December 2010, May and August 2011 responded to several email requests to complete the Career Plans Survey on line between April and November 2011. The SEAS Academic Programs office sent an email to the graduating students asking them to complete the survey as part of the graduation process. A link was added to the Engineering section of the Career Services website for any student in the Class of 2011 who was browsing the site. In November a friendly request (email and phone) was sent to students who had not responded to earlier requests or who had previously indicated they were still seeking employment or graduate school admission. A search of LinkedIn and the Penn Alumni on line directory was accessed to search for any updated information from those who had not responded to all requests.

## SECTION 1 - RESPONDENTS

<u>Year</u>	<u>Degrees Awarded</u>	<u>Surveys Returned</u>	<u>Percent Response %</u>
2011	358	341	95.25%
2010	346	332	95.95%
2009	367	333	90.74%
2008	318	302	94.97%
2007	290	281	96.89%

## SECTION 2 – PURSUITS

<u>Plan</u>	<u>Responses</u>	<u>2010-2011 %</u>	<u>2009-2010 %</u>	<u>2008-2009 %</u>
Full-time Employment	216	63.3	62	55.6
Self-Employed	5	1.5	2	2.4
Attending Full-Time Graduate School	83	24.3	23	26
Seeking Full-time Employment	17	5	8	8
Seeking Graduate School Admission	5	1.5	2	3
Other	4	1.2	2	3
Post-Baccalaureate Studies	8	2.3	1	2
Accepted Short-Term Employment	3	.9		
<b>TOTAL</b>	<b>341</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

## SECTION 3 - ANALYSIS OF EMPLOYED RESPONDENTS

Number Accepted	Organization
8	UBS
7	Microsoft
6	Barclays Capital, Goldman Sachs, Schlumberger
5	Citigroup, Credit Suisse, Deloitte Consulting
4	Accenture, Bank of America, PricewaterhouseCoopers, ZS Associates
3	Bain & Co, Bloomberg, Boston Consulting Group, DreamWorks Animation, Google, McKinsey & Co, Procter & Gamble, SAP America, The Blackstone Group
2	Booz & Co, Electronic Arts, Epic Systems, Facebook, Ginkgo BioWorks, IBM, IMS Health, JP Morgan, Mars & Co, Mondre Energy, Street Solutions, Syngy, Two Sigma Investments

## Geographic Distribution of Jobs

<u>Area</u>	<u>Number</u>	<u>Percent %</u>
United States		
Northeast	15	7
Mid-Atlantic	122	57
Southeast	6	3
Midwest	12	6
Southwest	3	1
West	31	14
Northwest	9	4
*Abroad	17	8
<b>Total:</b>	<b>215</b>	<b>100.0%</b>

\*Congo, France, Hong Kong, India, Iraq, Japan, Malaysia, Mexico, Singapore, Sweden, United Kingdom

## Date Received Offer

167 graduates reported the date they received the offer for the position they accepted. 69% of Engineering graduates received their job offer before January 2011 and 94% received their offer prior to graduation.

<u>Date Received Offer</u>	<u>Percent %</u>
Before September 2010	23
September – December 2010	46
January – May 2011	25
June – September 2011	6
<b>Total:</b>	<b>100%</b>

## On-Campus Recruiting Interview Activity

Total Number of Employers: 361  
Total Number of Scheduled Interviews: 14,739

## Range and Average Number of Interviews Per Employed Student

	<u>Range</u>	<u>Average</u>
On-Campus Recruiting Interviews	1 - 50	7.6
Interviews Resulting from Career Services Leads	1 - 10	3.1
Interviews on Their Own	1 - 40	3.5

## Range and Average Number of Job Offers Received Per Student

	<u>Range</u>	<u>Average</u>
On-Campus Recruiting Offers	1 - 6	1.8
Career Services Offers (Career Day, PennLink)	1 - 3	1.3
Offers from sources other than OCRS and Career Services	1 - 6	1.4
All Offers Combined	1 - 8	2.0

## How Full-time Employed Respondents Received Their Job Offer

	<u>Percent %</u>
On-Campus Recruiting (OCR)	39
Previous OCR Employer (Summer internship obtained through OCR, resulting in full-time offer)	18
Family/Friends/Contacts	6
Internet	3
Department	1
Previous Non-OCR Employer (Summer internship not obtained through OCR, resulting in full-time offer)	7
Applied Directly to Organization	11
Other Career Services Leads	15

## Average Starting Salary by Year

66.2% of the students who accepted full time employment reported their salaries.

<u>Year</u>	<u>Average Salary</u>	<u>% Change from Previous</u>
2011	\$68,814	12.07
2010	\$61,401	-.78
2009	\$61,884	-1.3
2008	\$62,680	4.2
2007	\$60,151	3.6

The salary range for 2011 was \$24,000 - \$120,000

## Average Bonus Figures

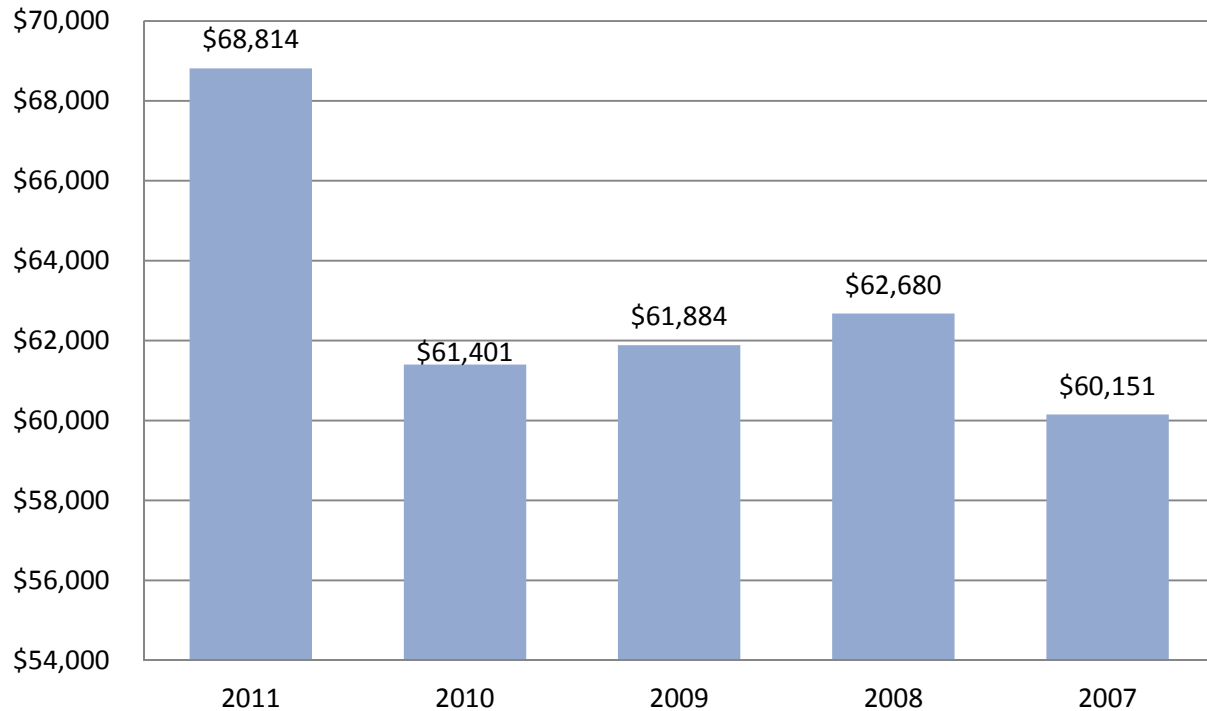
Sign-on Bonus

\$8,900 (based on 94 responses)

Annual Bonus (Estimated)

\$20,701 (based on 83 responses)

## AVERAGE STARTING SALARY BY YEAR



## Average Salary by Major

Major**	Surveys w/ Salaries	Average	Range
Applied Science			
Biomedical Science	6	\$61,583	\$39,500 - \$70,000
Cognitive Science	1	*	*
Computer Science	21	\$76,238	\$50,000 - \$120,000
Bioengineering	18	\$60,262	\$30,000 - \$70,000
Chemical & Biomolecular Eng.	7	\$64,143	\$24,000 - \$96,000
Computer Science	15	\$76,867	\$54,000 - \$100,000
Computer Science & Engineering	2	*	*
Digital Media Design	8	\$68,250	\$40,000 - \$90,000
Electrical Engineering	9	\$65,850	\$40,000 - \$90,000
Individualized	1	*	*
Materials Science & Eng.	12	\$64,500	\$50,000 - \$75,000
Mech. Eng. & Appl. Mech.	16	\$65,437	\$45,000 - \$88,000
Systems Science & Eng.	27	\$69,611	\$55,000 - \$105,000
SEAS – Single Degree	60	\$65,237	\$24,000 – \$100,000
SEAS/CAS – Dual Degree	9	\$68,000	\$55,000 – \$90,000
SEAS/WH – Dual Degree	52	\$71,656	\$45,000 – \$120,000
SEAS/GSAS	2	*	*
SEAS/SEAS Dual Degree	13	\$70,538	\$30,000 – \$105,000
Dual SEAS degrees/CAS	2	*	*
Dual SEAS degrees/WH	5	\$70,400	\$65,000 - \$80,000

\* Salary not reported to maintain confidentiality

\*\* Salaries by major include single and dual degree graduates

## Average Salary by Gender

Male (SEAS Only)	\$65,138 (Based on 40 Responses)
Female (SEAS Only)	\$65,435 (Based on 20 Responses)
Male SEAS/CAS	\$66,889 (Based on 9 Responses)
Female SEAS/CAS	* (Based on 2 Responses)
Male SEAS/WH	\$72,841 (Based on 43 Responses)
Female SEAS/WH	\$67,500 (Based on 14 Responses)
Male with 2 SEAS Degrees	\$71,700 (Based on 10 Responses)
Female with 2 SEAS Degrees	\$66,667 (Based on 3 Responses)
Male SEAS/GSAS	* (Based on 2 Responses)

## Average Salary by Job Type

Job Type	Number of Respondents	Average Salary	Range
<b>Art and Culture</b>			
Graphics/Design	1	*	*
<b>Consulting</b>			
Research	1	*	*
Technical/Information Systems	12	\$67,058	\$50,000 - \$74,500
Management/Strategy	27	\$65,283	\$54,000 - \$75,000
<b>Energy/Environment</b>			
Management & Policy	1	*	*
<b>Engineering</b>			
Design	4	\$57,500	\$45,000 – \$70,000
Manufacturing/Production	3	\$69,000	\$65,000 – \$72,000
Research & Development	8	\$59,964	\$30,000 – \$88,000
Project Management	3	\$82,000	\$70,000 – \$96,000
<b>Finance – Investment Analysis</b>			
Commercial Banking / Lending	1	*	*
Fin. Planning & Analyst (non-banking)	1	*	*
Private Equity Analyst	3	\$68,333	\$65,000 – \$70,000
Securities Research Analyst	5	\$69,000	\$65,000 – \$70,000
Investment Banking Analyst	21	\$71,455	\$70,000 – \$92,000
Trading	7	\$77,857	\$50,000 – \$105,000
Venture Capital Analyst	1	*	*
<b>Information Technology</b>			
Software Developer/Engineer	17	\$84,559	\$40,000 – \$105,000
Systems Engineer / Analyst	2	*	*
Technology Analyst	5	\$64,000	\$60,000 – \$70,000
Tech. Artist/Animator/Game Developer	1	*	*
Program Manager	3	\$100,500	\$81,000 - \$120,000
Product Designer	1	*	*
Programmer	2	*	*
Technical Director	1	*	*
Technical Support Specialist	3	\$60,000	*
<b>Insurance</b>			
Actuarial	1	*	*

## Average Salary by Job Type (continued)

<b>Job Type</b>	<b>Number of Respondents</b>	<b>Average Salary</b>	<b>Range</b>
<b>Management</b>			
General Management	1	*	*
<b>Marketing</b>			
Product/Brand Management	1	*	*
Marketing Analysis/Research	1	*	*
New Business Development	1	*	*
<b>Other</b>			
	1	*	*
<b>Scientific Research</b>			
Biomedical (Other)	3	\$31,167	\$24,000 - \$39,500

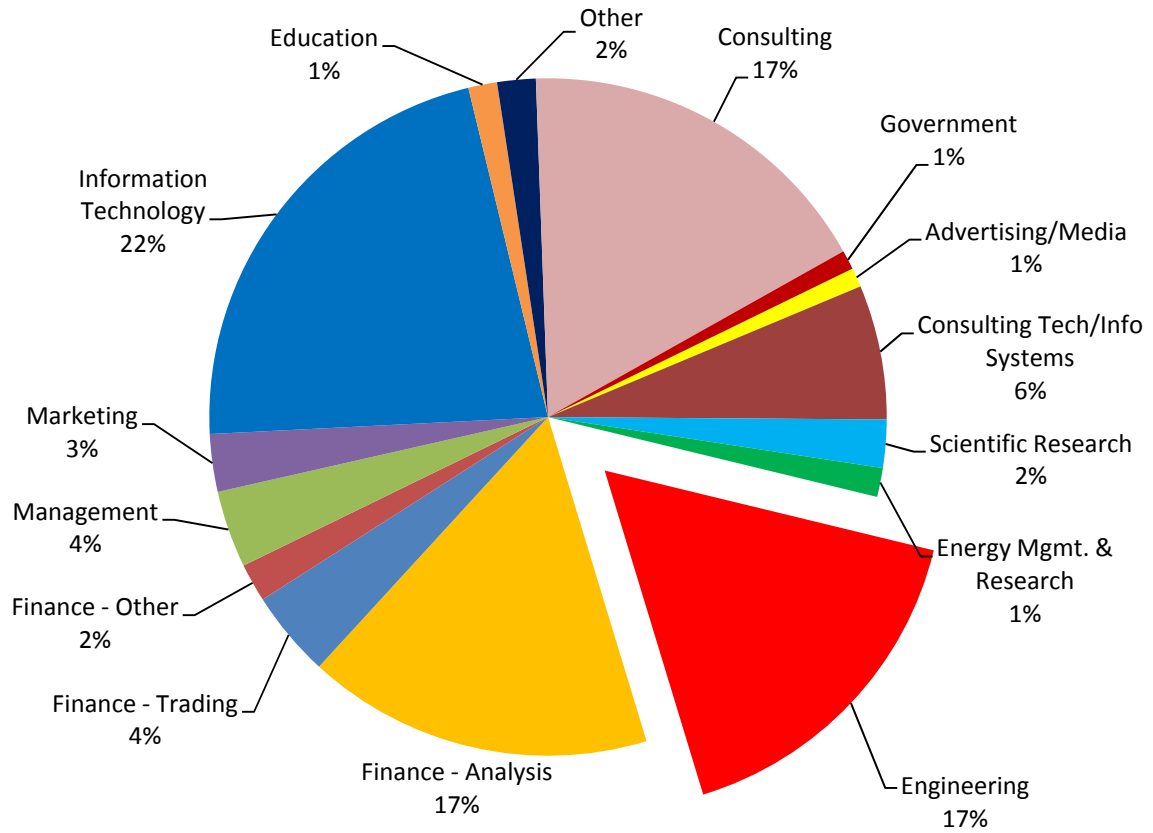
\* Salary/salaries not reported to maintain confidentiality

## Average Salary by Industry

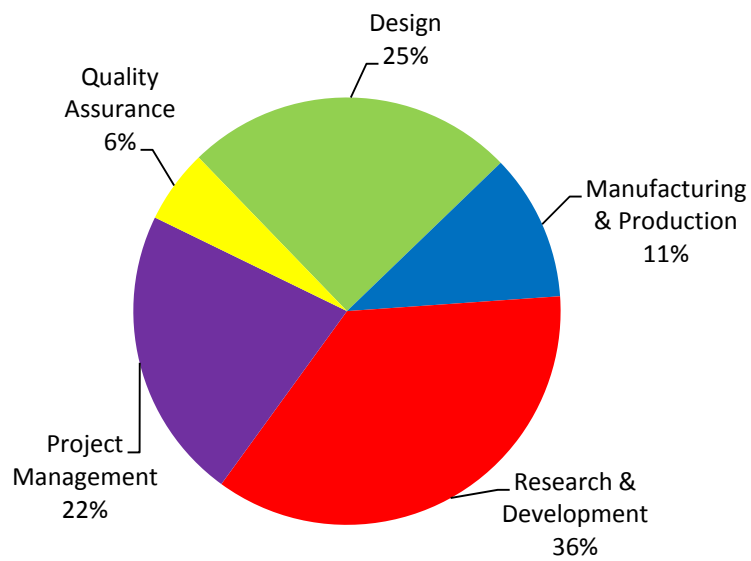
<b>Industry</b>	<b>Number of Respondents</b>	<b>Average Salary</b>	<b>Range</b>
<b>Communications</b>			
Media / Entertainment	5	\$65,000	\$40,000 - \$90,000
<b>Consulting</b>			
	37	\$65,545	\$50,000 – \$80,000
<b>Energy/Natural Resources/Utilities</b>			
Energy	5	\$69,833	\$45,000 – \$96,000
<b>Financial Services</b>			
Financial Services	51	\$73,451	\$50,000 – \$105,000
<b>Government</b>			
U.S. National Laboratories	1	*	*
<b>Health Care</b>			
Hospital	2	*	*
<b>Insurance</b>			
	1	*	*
<b>Manufacturing</b>			
Aerospace	2	*	*
Computer Products - Hardware	2	*	*
Electronics/Robotics	3	\$59,333	\$45,000 – \$72,000
Consumer Products	3	\$63,000	\$55,000 – \$69,000
Biomedical Products/Pharmaceuticals	2	*	*
Manufacturing (Other)	3	\$59,333	\$58,000 – \$60,000
<b>Technology</b>			
	26	\$74,058	\$40,000 - \$120,000

\* Salary/salaries not reported to maintain confidentiality

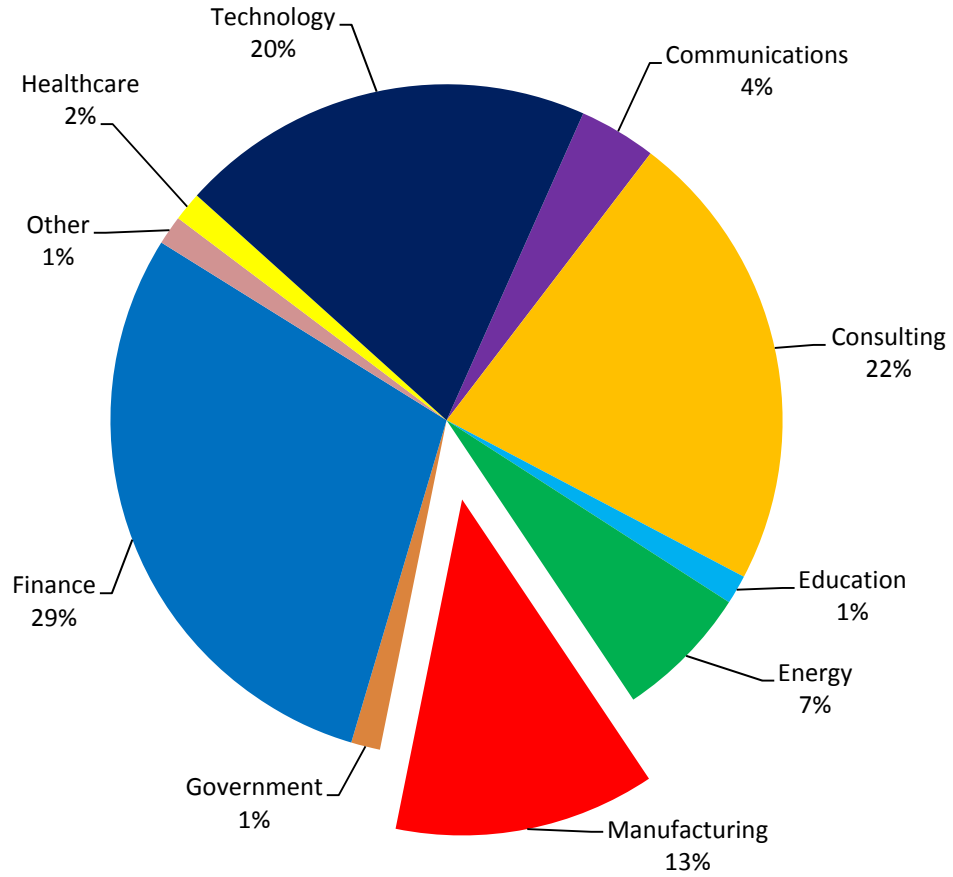
## All Employed Respondents by Job Type (with Engineering Breakdown)



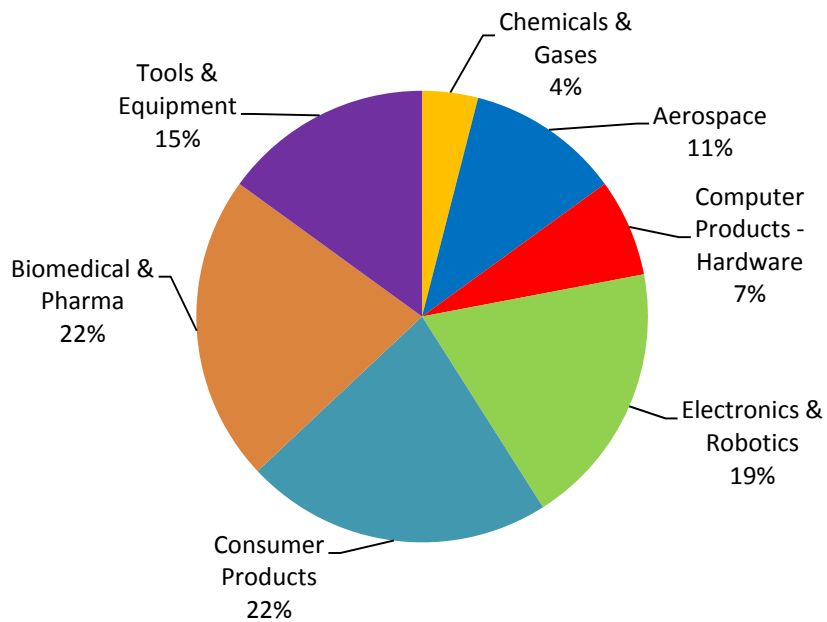
## Engineering



## All Employed Respondents by Industry (with Manufacturing Breakdown)



### Manufacturing



## Employers Reported by Major

### Engineering Only

#### **Applied Science – Biomedical Science**

Memorial Sloan-Kettering Cancer Center, New York, NY, Research Study Assistant  
Organization Not Provided, Location Not Provided, Position Not Provided  
Strategic Research Insights, Plainsboro, NJ, Research Associate

#### **Applied Science – Computer and Cognitive Science**

Organization Not Provided, Location Not Provided, Position Not Provided

#### **Applied Science – Computer Science**

ADP, New York, NY, Technologies Consultant  
Brightroll, San Francisco, CA, Software Engineer  
Goldman Sachs, New York, NY, Analyst  
Details Not Provided

#### **Bioengineering**

Children's Hospital of Philadelphia, Philadelphia, PA, Research Assistant  
Deloitte Consulting, Boston, MA, Business Technology Analyst  
Exeter Group, Cambridge, MA, Consultant  
Goldman Sachs, New York, NY, Analyst  
IMS Consulting, New York, NY, Analyst  
IMS Health, New York, NY, Analyst  
IMS Health, New York, NY, Analyst  
Lincoln Financial Group, Philadelphia, PA, Leadership Preparation Program Participant  
MAP Pharmaceuticals, San Francisco, CA, Engineer  
Maximus, Reston, VA, Associate Engineer  
Merck & Co., Inc., West Point, PA, Associate Engineer  
National Institutes of Health, Bethesda, MD, Postbac IRTA  
Neuromatters, New York, NY, Research Associate  
Details Not Provided  
PriceSpective, Blue Bell, PA, Analyst  
PricewaterhouseCoopers, New York, NY, Business Associate  
Procter & Gamble, Cincinnati, OH, Engineer  
Schlumberger, Basra, Iraq, Field Engineer  
The Frankel Group, New York, NY, Analyst  
The Zitter Group, Millburn, NJ, Consultant  
ZS Associates, New York, NY, Operations Research Assistant

#### **Chemical and Biomolecular Engineering**

Anheuser-Busch InBev, Newark, NJ, Manager  
Avocado GreenTech Startup, San Francisco, CA, Entrepreneur/Founder  
Bank of America, New York, NY, Global Research Analyst  
Buzz Bakery, Ballston, VA, Pastry Intern  
Ecological Group, New York, NY, Junior Engineer  
Ginkgo BioWorks, Boston, MA, Wetware Intern  
Lux Research, New York, NY, Research Associate  
Mars & Co., Greenwich, CT, Associate Consultant  
Mondre Energy, Inc., Philadelphia, PA, Energy Engineer  
Organization Not Provided, Hong Kong, People's Republic of China, Position Not Provided  
OSISoft, Philadelphia, PA, Customer Support Engineer  
PriceWaterhouseCoopers, New York, NY, Consultant  
Procter & Gamble, Cincinnati, OH, Engineer  
Procter & Gamble, Cincinnati, OH, Principal Engineer  
Schlumberger, WY, Field Engineer  
Schlumberger, Pointe-Noire, Congo, Junior Field Engineer  
Schlumberger, Villahermosa, Mexico, Field Engineer  
University of Rochester Medical Center, New York, NY, Lab Technician

#### **Computer Science**

Amazon.com, Seattle, WA, Software Development Engineer  
Barclays Capital, New York, NY, Analyst  
Global eProcure, Clarke, NJ, Associate Consultant  
IBM, Kirkland, WA, Junior Level Programmer  
Lockheed Martin, King of Prussia, PA, Associate Software Engineer  
Organization Not Provided, Boston, MA, Position Not Provided  
Rapleaf, Inc, San Francisco, CA, Software Engineer  
SAP America, Newtown Square, PA, Support Consultant II  
Two Sigma Investments, New York, NY, Software Developer

## **Digital Media Design**

Bloomberg LP, New York, NY, Financial Software Developer  
DreamWorks Animation, Glendale, CA, Department Technical Director  
DreamWorks Animation, Redwood City, CA, Visual Effects Artist  
Electronic Arts, Redwood Shores, CA, Software Engineer  
Facebook, Palo Alto, CA, Software Engineer  
Microsoft, Redmond, WA, Program Manager  
Microsoft, Redmond, WA, Software Development Engineer  
The Mechanism, New York, NY, Front End Developer  
Thomson Reuters, New York, NY, Freelance Animator/Graphic Designer  
Twitter, San Francisco, CA, Front-End Engineer

## **Electrical Engineering**

BuLogics, Philadelphia, PA, Embedded Software Developer  
Citigroup, New York, NY, Analyst  
Deloitte Consulting, Philadelphia, PA, Business Technology Analyst  
U.S. Air Force, Macon, GA, Electronics Engineer

## **Materials Science and Engineering**

FormFactor, Livermore, CA, Process Engineer  
Heraeus, Conshohocken, PA, R&D Technician  
Mondre Energy, Inc., New York, NY, Energy Engineer  
Synogy, Inc., Chester, PA, Associate Business Analyst

## **Mechanical Engineering and Applied Mechanics**

Accenture, Philadelphia, PA, Technology Consulting  
Adams Golf, Dallas, TX, Design Engineer  
Bharat Light and Power, India, Analyst  
Credit Suisse, New York, NY, Analyst  
Cummins, Inc., Columbus, IN, Product Validation Engineer  
ExxonMobil, Fairfax, VA, Engineer  
General Dynamics Electric Boat, Groton, CT, Position Not Provided  
Details Not Provided  
Details Not Provided  
Presair, Mamaroneck, NY, Position Not Provided  
SAP America, Newtown Square, PA, Junior Support Engineer  
Schlumberger, Houston, TX, Field Engineer  
Schlumberger, Tulsa, OK, Junior Field Engineer  
Sikorsky, Stamford, CT, Position Not Provided  
Tally Solutions Pvt. Ltd., Bangalore, India, Executive Director  
Teach for America, Los Angeles, CA, Secondary General Science Teacher  
UBS, London, United Kingdom, Trader  
Weir Specialty Pumps, Salt Lake City, UT, Graduate Engineer  
WP Sailing Association, Location Not Provided, Instructor

## **Systems Science and Engineering**

33Across, Inc., Philadelphia, PA, Campaign Analyst  
Accenture, New York, NY, Technology Consulting  
Accenture, Philadelphia, PA, Analyst  
Bank of America, New York, NY, Trading Analyst  
Booz & Company, Location Not Provided, Strategy Consultant  
Citigroup, New York, NY, Analyst  
Citigroup, New York, NY, Quantitative Trading and Analysis Analyst  
Computer Aid, Inc., Philadelphia, PA, Recruiting Analyst  
Deloitte Consulting, New York, NY, Business Technology Analyst  
Google, Mountain View, CA, Technical Services Associate  
Street Solutions Inc., Jersey City, NJ, Business Technology Analyst  
Street Solutions Inc., Jersey City, NJ, Business Technology Analyst  
The Raine Group, New York, NY, Analyst  
U.S. Navy, Philadelphia, PA, U.S. Naval Officer  
UBS, San Francisco, CA, Analyst  
UBS, Stamford, CT, Analyst

## **Engineering & CAS**

### **Applied Science – Computer Science & CAS**

Bloomberg LP, New York, NY, Financial Software Developer  
Goldman Sachs, New York, NY, Technology Analyst  
Goldman Sachs, New York, NY, Analyst  
Sony Pictures ImageWorks, Culver City, CA, Matte Painting Intern  
TripAdvisor, Newton, MA, Software Engineer

## **Bioengineering & CAS**

TriTek Solutions, New York, NY, Business Associate

## **Computer Science & CAS**

Details Not Provided

## **Electrical Engineering & CAS**

Inductotherm, Rancocas, NJ, Field Engineer

J.P. Morgan, New York, NY, Analyst

## **Individualized Major & CAS**

J.P. Morgan, New York, NY, Analyst

## **Material Science and Engineering & CAS**

ZS Associates, Philadelphia, PA, Business Associate

## **Systems Science and Engineering & CAS**

Barclays Capital, New York, NY, Technology Analyst

Organization Not Provided, India, Position Not Provided

Syngy, Inc., Chester, PA, Associate Consultant

## **Engineering & Wharton**

### **Applied Science – Biomedical Science & Wharton**

AQR Capital, New York, NY, Analyst

Barclays Capital, New York, NY, IBD Analyst

Goldman Sachs, New York, NY, Analyst

McKinsey & Company, New York, NY, Business Analyst

The Blackstone Group, New York, NY, Analyst

The Blackstone Group, New York, NY, Analyst

UBS, San Francisco, CA, Analyst

### **Applied Science – Computer and Cognitive Science & Wharton**

Bank of America, New York, NY, Analyst

### **Applied Science – Computer Science & Wharton**

Allstate Investments, LLC, Chicago, IL, Associate Analyst

AXA Equitable, New York, NY, Actuarial Assistant

Bain & Company, New York, NY, Associate Consultant

Credit Suisse, New York, NY, Analyst

Deloitte Consulting, New York, NY, Human Capital Analyst

Evercore Partners, New York, NY, Analyst

Galt & Company, New York, NY, Consultant

GIC, Singapore, Investment Analyst

Gleacher & Company, New York, NY, Analyst

Goldman Sachs, Singapore, Analyst

Google, Mountain View, CA, Associate Product Manager

Guggenheim Securities, New York, NY, Analyst

Jane Street Capital, New York, NY, Trader

Kraft Foods, Tarrytown, NY, Brand Assistant

McKinsey & Company, Palo Alto, CA, Business Analyst

Microsoft, Redmond, WA, Associate Product Manager

Microsoft, Redmond, WA, Program Manager

Microsoft, Seattle, WA, Associate Product Manager

Microsoft, Seattle, WA, Program Manager

Morgan Stanley, Philadelphia, PA, Analyst

Zynga, San Francisco, CA, Product Manager

### **Bioengineering & Wharton**

Capital One, McLean, VA, Business Analyst

Credit Suisse, Singapore, Investment Banking Analyst

Epic Systems, Madison, WI, Technical Services

Sanford C. Bernstein, New York, NY, Research Associate

### **Chemical and Biomolecular Engineering & Wharton**

Hemlock Semiconductor, Hemlock, MI, Chemical Engineer

UBS, Weehawken, NJ, Business Analyst

### **Computer Science & Wharton**

Barclays Capital, New York, NY, Analyst

Boston Consulting Group, San Francisco, CA, Associate

Citigroup, Philadelphia, PA, STQA Analyst

### **Computer Science & Wharton (Continued)**

Epic Systems, Madison, WI, Reporting Engineer  
McKinsey & Company, Florham Park, NJ, Business Technology Analyst  
Microsoft, Seattle, WA, Program Manager

### **Electrical Engineering & Wharton**

ZS Associates, San Mateo, CA, Business Information Specialist Associate

### **Digital Media Design & Wharton**

Electronic Arts, Redwood City, CA, Associate Producer

### **Materials Science and Engineering & Wharton**

Booz & Company, San Francisco, CA, Consultant  
Boston Consulting Group, Philadelphia, PA, Associate  
Boston Consulting Group, Tokyo, Japan, Associate  
IBM, New York, NY, Consultant  
Jefferies & Company, New York, NY, Analyst  
Mars & Co., Greenwich, CT, Associate Consultant  
Oliver Wyman, New York, NY, Analyst

### **Mechanical Engineering and Applied Mechanics & Wharton**

Bain & Company, Boston, MA, Associate Consultant  
Earth Aid, Boston, MA, Operations Manager  
Echo Point Investment Management, Philadelphia, PA, Equity Analyst  
PricewaterhouseCoopers, Chicago, IL, Consultant  
Safe Transport Systems, LLC, Philadelphia, PA, Founder  
SAP America, Newtown Square, PA, Support Engineer  
The Blackstone Group, Menlo Park, CA, Analyst

### **Systems Science Engineering & Wharton**

Accenture, Philadelphia, PA, Analyst  
Bain & Company, Stockholm, Sweden, Associate Consultant  
Bank Negara Malaysia, Malaysia, Senior Executive  
Bank of America, New York, NY, Analyst  
Credit Suisse, Hong Kong, People's Republic of China, Position Not Provided  
Deloitte Consulting, San Francisco, CA, Business Analyst  
LLR Partners, Philadelphia, PA, Financial Analyst  
Moelis & Co., Los Angeles, CA, Analyst  
Novantas, New York, NY, Associate  
PricewaterhouseCoopers, Philadelphia, PA, Analyst  
Teaching Assistant Program, Creteil, France, Teaching Assistant  
UBS, New York, NY, Analyst

### **Engineering & Graduate School of Arts & Sciences**

#### **Computer Science and Engineering & Graduate School of Arts & Sciences**

Citadel, Chicago, IL, Financial Technology Associate

#### **Computer Science & Graduate School of Arts & Sciences**

Highbridge Capital Management, New York, NY, Software Developer

#### **Engineering Dual Majors & WH**

Barclays Capital, New York, NY, Analyst  
Barclays Capital, New York, NY, FX Trader  
Insight Venture Partners, New York, NY, Analyst  
L.E.K. Consulting, New York, NY, Associate  
SpaceWorks Enterprises, Inc., Washington, DC, Space Ventures Analyst  
UBS, New York, NY, Analyst

#### **Engineering Dual Majors & CAS**

Bain Capital, Boston, MA, Analyst  
First Manhattan Consulting Group, New York, NY, Analyst

#### **Engineering Dual Majors**

Applied Energy Systems, Malvern, PA, Controls Engineer  
Axiom SL, New York, NY, Analyst  
Bloomberg LP, New York, NY, Software Developer  
Chevron Energy Solutions, San Francisco, CA, Strategy Analyst  
Citigroup, New York, NY, Analyst

**Engineering Dual Majors (continued)**

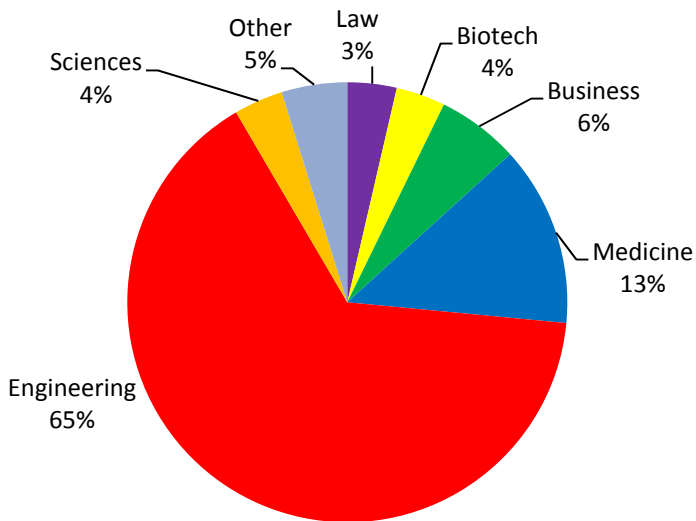
Credit Suisse, New York, NY, Business Analyst  
Cummins, Inc., Columbus, IN, Electronic Control Architect  
DreamWorks Animation, Glendale, CA, Technical Director  
Facebook, Palo Alto, CA, Software Engineer  
Ginkgo Bioworks, Boston, MA, DNA Padawan  
Google, New York, NY, Software Development Engineer  
Micron Technology, Manassas, VA, Shift Engineer  
Momentum Dynamics, Malvern, PA, Mechanical Engineer  
NextFab Studio, Philadelphia, PA, Electrical Engineer  
Oracle Corporation, Singapore, Software Developer  
PRTM, New York, NY, Consultant  
Susquehanna International Group, Bala Cynwyd, PA, Technical Associate  
Teach Pakistan Initiative, Philadelphia, PA, Project Director  
Two Sigma Investments, New York, NY, Software Developer  
UBS, Stamford, CT, Software Developer  
ZL Technologies, San Jose, CA, Business Development and Marketing Associate  
ZS Associates, Chicago, IL, Operations Research Associate

## SECTION 4 - ANALYSIS OF GRADUATE STUDY RESPONDENTS

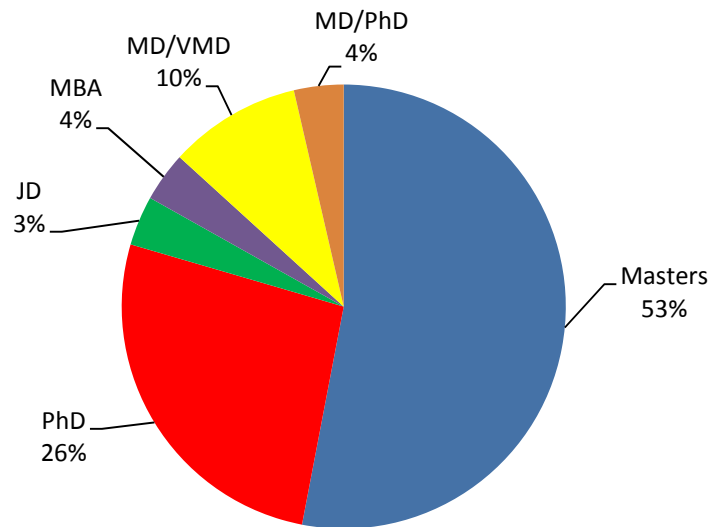
### Fields of Full-time Graduate Study

Field	2011%	2010%	2009%
Engineering	65	64.9	59.8
Medicine/Dentistry/Pharma	13	16.9	19.5
Business	6	1.3	6.9
Biotechnology	4	2.6	3.4
Law	3	5.2	1.2
Sciences	4	6.5	8
Other	5	2.6	1.2

### Areas of Graduate Study



### Graduate School Degrees



### Degrees Being Pursued

Major	Masters	PhD	MBA	MD & PhD	MD/DVM/DDS	JD	Other
AS – Biomedical Science			1			1	
AS – Computer & Cognitive Science					1		
AS – Computer Science		2					
Bioengineering	14	6		1	5	2	
Chemical & Biomolecular Engineering	2	4		2	1		
Computer Science	7	1					
Computer Science & Engineering	1						
Digital Media Design	2	1					
Electrical Engineering	4	3					
Materials Science & Eng.	1	3					
Mechanical Eng. & Applied Mechanics	8	2	2		1		
Systems Science & Engineering	5						
<b>Total</b>	<b>44</b>	<b>22</b>	<b>3</b>	<b>3</b>	<b>8</b>	<b>3</b>	

## Graduate Schools Attended by Major

### Applied Science – Biomedical Science

Columbia University, New York, NY, JD, Law  
Yale University, New Haven, CT, MBA, Business

### Applied Science – Computer and Cognitive Science

University of Maryland Baltimore, Baltimore, MD, Medicine

### Applied Science – Computer Science

Johns Hopkins University, Baltimore, MD, PhD, Biomedical Engineering  
Stanford University, Palo Alto, CA, PhD, Organizational Behavior

### Bioengineering

American University, Washington DC, JD, Intellectual Property  
Carnegie Mellon University, Pittsburgh, PA, MS/MS, Biomedical Engineering  
Fels Institute of Government, Philadelphia, PA, MPA, Public Administration  
Georgetown University, Washington DC, MS, Physiology and Biophysics  
Harvard-MIT Division of Health Sciences and Technology, Cambridge, MA, PhD, Medical Engineering/Medical Physics  
Johns Hopkins University, Baltimore, MD, PhD, Materials Science  
Perelman School of Medicine, Philadelphia, PA, MD, Medicine  
Stanford University, Palo Alto, CA, MS, Mechanical Engineering  
Stanford University, Stanford, CA, PhD, Biochemistry  
SUNY Stony Brook School of Medicine, Stony Brook, NY, MD, Medicine  
University of California, Berkeley Law School, Berkeley, CA, JD, Law  
University of California, Berkeley, Berkeley, CA, PhD, Bioengineering  
University of California, San Diego, La Jolla, CA, PhD, NanoEngineering  
University of Maryland, Silver Spring, MD, MD, Medicine  
University of Med. & Dent. of NJ- Robert Wood Johnson, New Brunswick, NJ, MD, Medicine  
University of Pennsylvania, Philadelphia, PA, MB, Biotechnology  
University of Pennsylvania, Philadelphia, PA, MB, Biotechnology  
University of Pennsylvania, Philadelphia, PA, MSE, Bioengineering  
University of Pennsylvania, Philadelphia, PA, MSE, Bioengineering  
University of Pennsylvania, Philadelphia, PA, MSE, Bioengineering  
University of Pennsylvania, Philadelphia, PA, MSE, Bioengineering  
University of Pennsylvania, Philadelphia, PA, MSE, Bioengineering  
University of Pennsylvania, Philadelphia, PA, MSE, Bioengineering  
University of Pennsylvania, Philadelphia, PA, MSE, Bioengineering  
University of Pennsylvania, Philadelphia, PA, MSE, Nanotechnology  
University of Rochester, Rochester, NY, PhD, Biomedical Engineering  
Vanderbilt University School of Medicine, Nashville, TN, MD/PhD, Physician/Scientist  
Vanderbilt University School of Medicine, Nashville, TN, MD, Medicine

### Chemical & Biomolecular Engineering

Carnegie Mellon University, Pittsburgh, PA, PhD, Materials Science and Engineering  
Columbia University, New York, NY, MD/PhD, Medicine  
Tufts University, Medford, MA, PhD, Chemical and Biological Engineering  
University of California, Berkeley, Berkeley, CA, PhD, Plant Biology  
University of Delaware, Newark, DE, PhD, Chemical Engineering  
University of Pennsylvania, Philadelphia, PA, MB, Biotechnology  
University of Pennsylvania, Philadelphia, PA, MSE, Chemical and Biomolecular Engineering  
Weill Cornell Medical College, MD, Medicine  
Yale University, New Haven, CT, MD/PhD, Medicine/Biomedical Engineering

### Computer Science

Columbia University, New York, NY, PhD, Economics  
Harvard, Cambridge, MA, MS, Computer Science  
School Not Provided, MS, Major Not Provided  
University of Pennsylvania, Philadelphia, PA, MSE, Computer and Information Science  
University of Pennsylvania, Philadelphia, PA, MSE, Computer and Information Science  
University of Pennsylvania, Philadelphia, PA, MSE, Computer and Information Science  
University of Pennsylvania, Philadelphia, PA, MSE, Computer Graphics and Game Technology  
University of Pennsylvania, Philadelphia, PA, MSE, Embedded Systems

### Computer Science & Engineering

University of Pennsylvania, Philadelphia, PA, MSE, Computer and Information Science

### Digital Media Design

University of Pennsylvania, Philadelphia, PA, MSE, Computer Graphics and Game Technology  
University of Pennsylvania, Philadelphia, PA, MSE, Computer Graphics and Game Technology  
University of Rochester, Rochester, NY, PhD, Computer Science

### Electrical Engineering

City University of New York, New York, NY, PhD, Mathematics  
University of California - Berkeley, Berkeley, CA, PhD, Electrical Engineering

### **Electrical Engineering (continued)**

University of California, Los Angeles, Los Angeles, CA, MS/PhD, Electrical Engineering  
University of Pennsylvania, Philadelphia, PA, MES, Environmental Policy  
University of Pennsylvania, Philadelphia, PA, MSE, Electrical Engineering  
University of Pennsylvania, Philadelphia, PA, MSE, Electrical Engineering  
University of Virginia, Charlottesville, VA, PhD, Computer Engineering

### **Materials Science & Engineering**

Massachusetts Institute of Technology, Cambridge, MA, PhD, Chemical Engineering  
Northwestern University, Evanston, IL, PhD, Materials Science and Engineering  
University of Chicago, Chicago, IL, PhD, Finance  
University of Pennsylvania, Philadelphia, PA, MSE, Materials Science and Engineering

### **Mechanical Engineering & Applied Mechanics**

Carnegie Mellon University, Pittsburgh, PA, MS, Robotic Systems Development  
Carnegie Mellon University, Pittsburgh, PA, PhD, Robotics  
George Washington University, Washington DC, MBA, Business  
HEC Paris, Paris, France, MBA, Business  
Massachusetts Institute of Technology, Cambridge, MA, PhD, Electrical Engin. & Computer Science  
School Not Provided, Degree Not Provided, Mechanical Eng. & Applied Mechanics  
Stanford University, Stanford, CA, MS, Mechanical Engineering  
University of Pennsylvania School of Veterinary Medicine, Philadelphia, PA, VMD, Veterinary Medicine  
University of Pennsylvania, Philadelphia, PA, MSE, Mechanical Eng. & Applied Mechanics  
University of Pennsylvania, Philadelphia, PA, MSE, Mechanical Eng. & Applied Mechanics  
University of Pennsylvania, Philadelphia, PA, MSE, Mechanical Eng. & Applied Mechanics  
University of Pennsylvania, Philadelphia, PA, MSE, Mechanical Eng. & Applied Mechanics  
University of Pennsylvania, Philadelphia, PA, MSE, Robotics

### **Systems Science & Engineering**

Dartmouth College, Hanover, NH, MEM, Engineering Management  
Imperial College Business School, UK, MS, Risk Management & Financial Engineering  
Stanford University, Palo Alto, CA, MS, Management Science and Engineering  
Stanford University, Stanford, CA, MS, Computer Science  
University of Pennsylvania, Philadelphia, PA, MSE, Systems Engineering