

School of Engineering & Applied Science

Master's Degree Candidates

Class of 2018

Career Plans Survey Report

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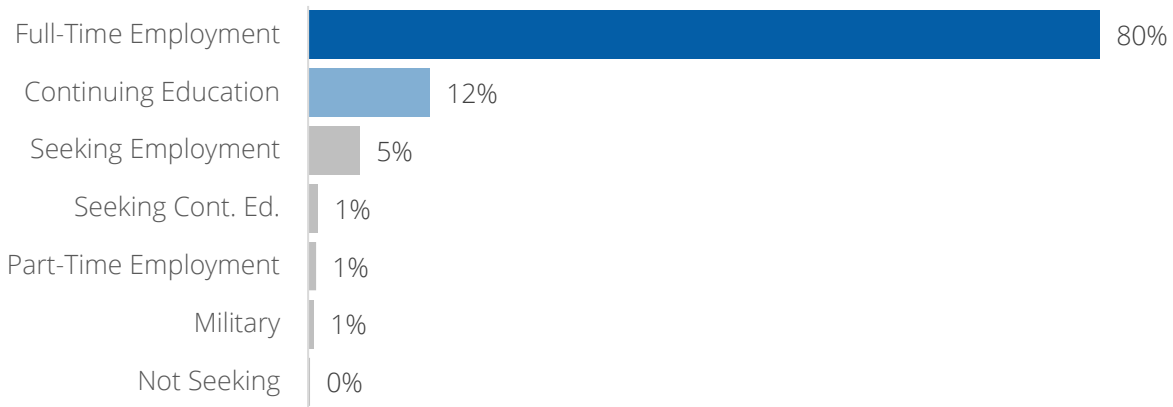
Methodology

Career Services at the University of Pennsylvania annually surveys graduating students to provide a snapshot of their post-graduation plans.

This report looks at School of Engineering & Applied Science graduate students who received master's degrees from August 2017–May 2018. Students were surveyed up to six months from their graduation date, with a 70% response rate. Additional information was then collected via LinkedIn and other sources, bringing the total knowledge rate up to 79%. Of the total 496 known outcomes, 90% came from online/phone surveys and 10% came from LinkedIn and other online sources.

Post-Graduation Plans

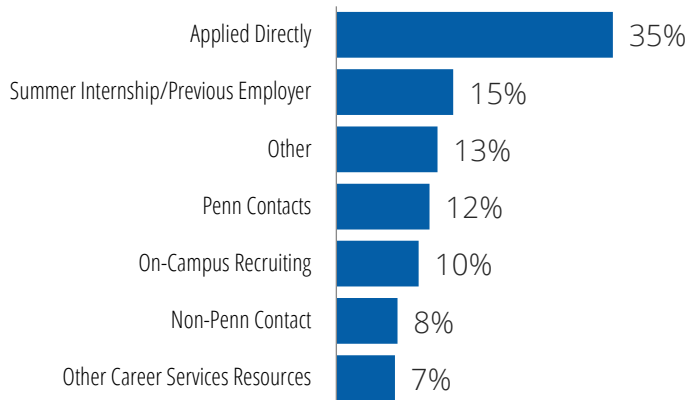
496 responses



Full-Time Employment

How They Heard About the Opportunity

297 responses

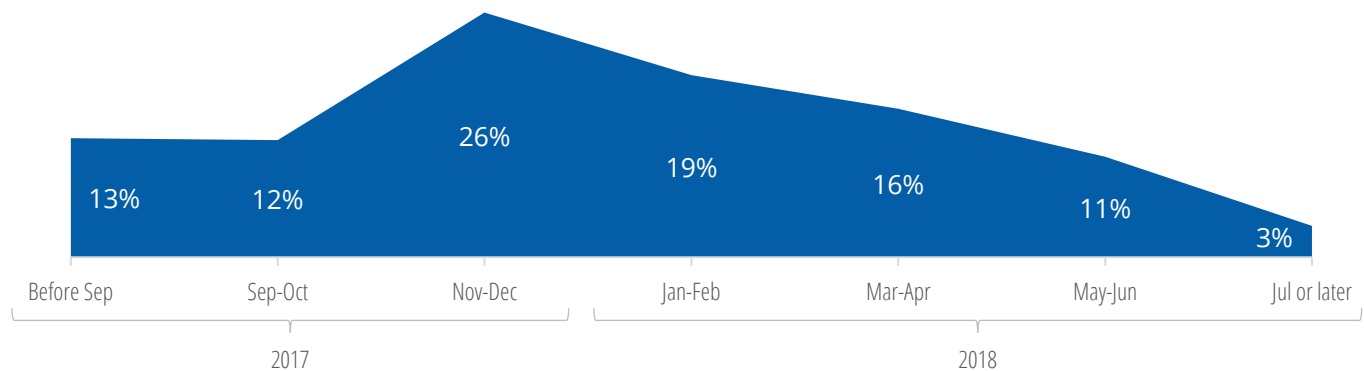


Top Employers

- Microsoft (22)
- University of Pennsylvania (16)
- Facebook (14)
- Google, Inc. (11)
- Amazon (9)
- Bloomberg (8)
- Apple (7)
- Lockheed Martin (5)
- Goldman Sachs (5)
- Massachusetts Institute of Technology (4)
- Deloitte (4)
- McKinsey & Company (4)
- IQVIA (4)

When They Received Their Offer

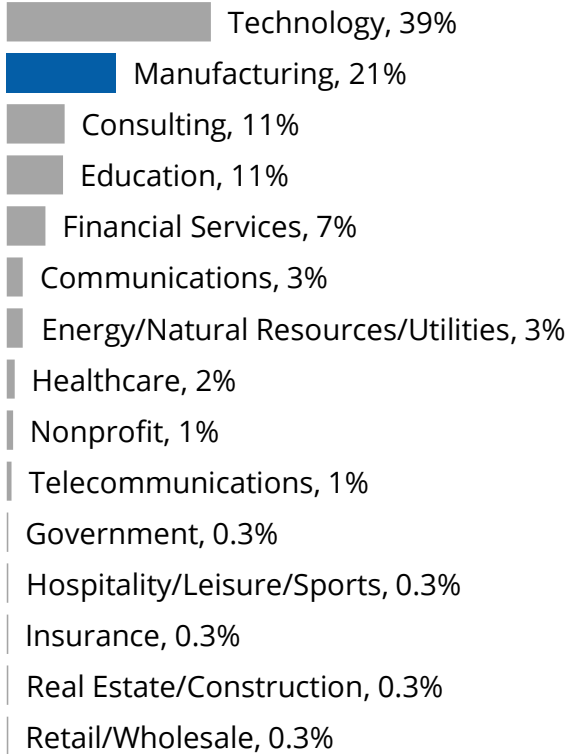
451 responses



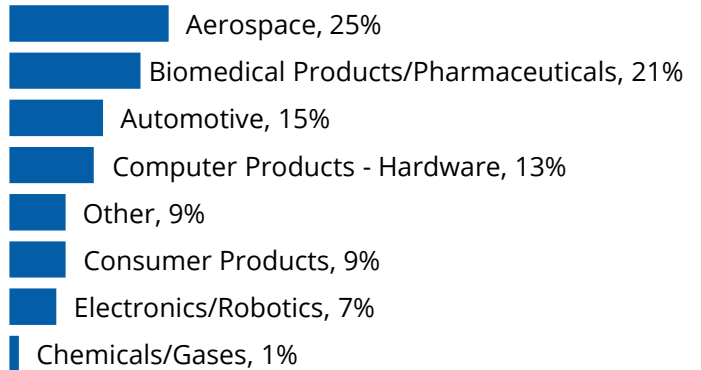
Full-Time Employment

Industry

327 responses

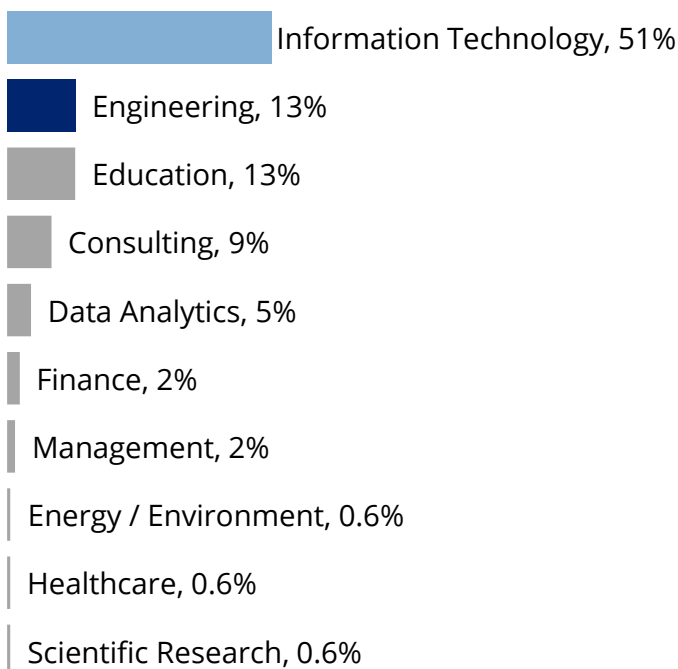


Manufacturing

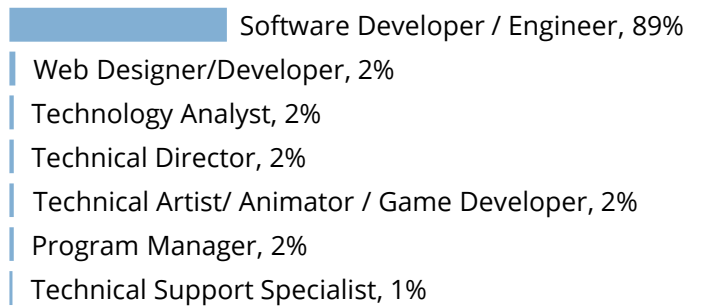


Job Function

315 responses



Information Technology



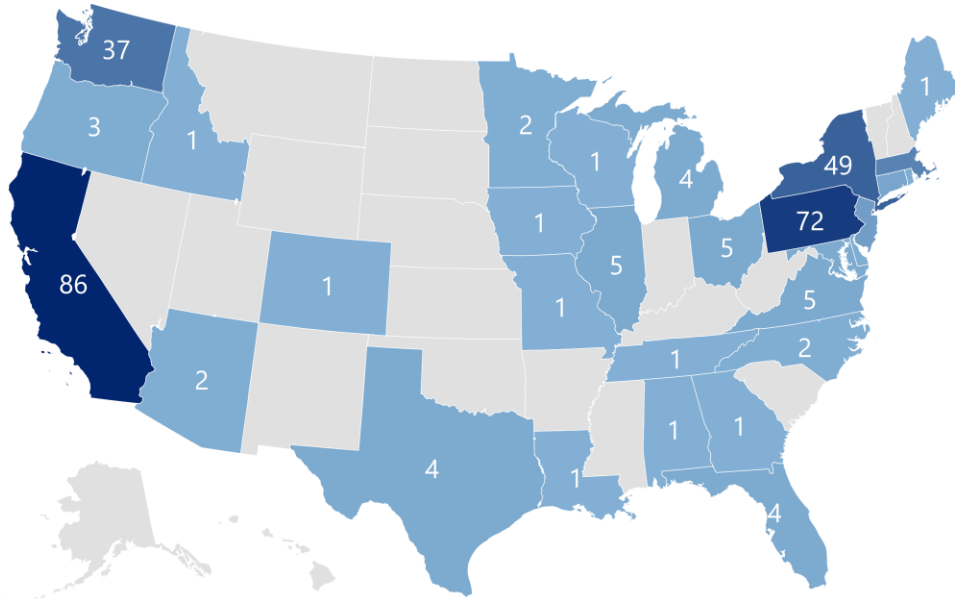
Engineering



Full-Time Employment

Employers by State

348 responses



Internationally

32 students in 10 countries

- Canada
- China (21)
- Hong Kong
- India
- Ireland
- Japan (3)
- Korea
- South Korea
- Taiwan
- Turkey

International Students

Of the 215 respondents working full-time who identified as “foreign nationals,” 177 (82%) were employed in the U.S.

U.S. Employers of Foreign Nationals

Consulting	University of Pennsylvania,	Exyn Technologies	Apple (4)	OSIsoft, LLC.
BluePrint Research Group	GRASP Laboratory (2)	Ford Motor Company	AstroNova, Inc.	RandomWalk Technologies
Clarivate Analytics	University of Pennsylvania,	GRAIL	Audible, Inc. (2)	Root AI
Deloitte	Quattrone Nanofabrication	Honda R&D Americas, Inc.	Baidu USA LLC	Shoobx
Gartner (2)	Facility Service Center	Honeywell International Inc.	Bloomberg (3)	VMware, Inc. (3)
Health Advances, LLC	University of Pennsylvania, Ghost	KLA-Tencor	Caliper	Wayfair
IBI Group	Robotics	Lutron Electronics Company, Inc.	Centrak	Other
IQVIA	University of Southern California,	NIO	Checkmate Diabetes	Biochem USA
McKinsey & Company (2)	Viterbi School of Engineering	Nokia	Cohesity (3)	Cadre
Moody's Analytics	Financial Services	Oculii	CONFETTI Interactive, Inc.	Electronic Arts
Plus Group Consulting	Akuna Capital	Optimus Ride	Crossbeam, Inc.	Framestore (2)
Engineering	AQR	Peanut Robotics	Facebook (10)	Ghost Robot
Technical Consulting & Research,	Bank of America	Pfizer	Google, Inc. (3)	Holtec International
Inc.	Bosen American Capital, Inc.	Procter & Gamble (P&G)	iCueMotion LLC	Horizon Media
The Boston Consulting Group	Citadel LLC	Rivian Automotive (3)	Indeed	Mayo Clinic
Education	Goldman Sachs (3)	Roche	Intel Corporation	Method Studios
Carnegie Mellon University	JPMorgan Chase & Co.	Siemens Healthineers (2)	JRI America, Inc.	National Grid
Massachusetts Institute of	Morgan Stanley	Stinger Ghaffarian Technologies	Juniper Networks	Penn Medicine
Technology (4)	Vanguard	TA Instruments, Inc.	Marble Robots Inc	Protective Life Insurance
Perelman School of Medicine at	Manufacturing	United Technologies Corporation	Microsoft (18)	Company
the University of Pennsylvania	Adesis, Inc.	Technology	Microsoft Research (2)	Siemens Energy Inc.
The University of Texas at Austin	Amyris	Adobe Systems	Niantic, Inc.	Tenna
University of Maryland	Applied Materials	Airbnb	Nuro Inc.	Welligence Energy Analytics
University of Pennsylvania (8)	Aptiv	Amazon (7)	NVIDIA Corporation (2)	
	Augean Robotics, Inc.	Amazon Lab126	Oracle (3)	

Salaries

	Reporting	Median	Range	
Overall Salaries	229	\$96,016	\$100,000	\$160,000
Signing Bonuses	116	\$23,752	\$15,000	\$132,000

Salary by Industry

	Reporting	Median	Range	
Communications	8	\$84,500	\$70,000	\$130,000
Consulting	26	\$75,250	\$42,000	\$160,000
Education	15	\$55,000	\$35,000	\$132,500
Elementary/Secondary Education	1	-	-	-
Higher Education	13	\$55,000	\$35,000	\$132,500
Research Labs/Centers - Higher Education	1	-	-	-
Energy/Natural Resources/Utilities	7	\$68,000	\$59,000	\$120,000
Financial Services	14	\$110,000	\$80,000	\$150,000
Diversified Financial Services (including commercial/retail banking)	3	\$116,000	\$90,000	\$127,000
Investment Banking / Brokerage	7	\$110,000	\$85,000	\$110,000
Investment Management/Counsel	4	\$95,000	\$80,000	\$150,000
Manufacturing	47	\$87,000	\$42,000	\$142,000
Aerospace	13	\$87,000	\$50,000	\$142,000
Automotive	5	\$120,000	\$115,000	\$135,000
Biomedical Products/Pharmaceuticals	10	\$76,250	\$60,000	\$125,000
Chemicals/Gases	1	-	-	-
Computer Products - Hardware	8	\$87,500	\$42,000	\$131,000
Consumer Products	2	-	-	-
Electronics/Robotics	5	\$85,000	\$65,000	\$112,000
Other	3	\$72,000	\$65,000	\$120,000
Technology	95	\$115,000	\$35,000	\$150,000
Telecommunications	3	\$85,000	\$83,000	\$95,000

*Fewer than 3 reported salaries not published to maintain confidentiality.

Continued on Next Page

Salaries

Salary by Job Function

	Reporting	Median	Range	
Consulting	22	\$75,500	\$42,000	\$160,000
Management/Strategy	17	\$77,500	\$42,000	\$160,000
Technical/Information Systems	5	\$75,500	\$70,000	\$75,500
Data Analytics	8	\$87,750	\$60,000	\$130,000
Data Analyst	8	\$87,750	\$60,000	\$130,000
Education	16	\$53,810	\$35,000	\$132,500
Research	14	\$53,810	\$35,000	\$132,500
Teaching	2	-	-	-
Energy / Environment	2	-	-	-
Exploration and Production	2	-	-	-
Engineering	26	\$77,000	\$42,000	\$131,000
Construction	1	-	-	-
Design	4	\$75,000	\$42,000	\$85,000
Project Management	9	\$85,000	\$60,000	\$131,000
Research & Development	9	\$65,000	\$48,742	\$108,000
Systems	2	-	-	-
Testing	1	-	-	-
Finance	5	\$90,000	\$80,000	\$110,000
Financial Planning & Analysis (non-banking)	1	-	-	-
Investment Banking Analyst	2	-	-	-
Trading	2	-	-	-
Information Technology	119	\$112,000	\$35,000	\$150,000
Program Manager	2	-	-	-
Software Developer / Engineer	107	\$112,320	\$35,000	\$150,000
Technical Artist/ Animator / Game Developer	1	-	-	-
Technical Director	1	-	-	-
Technical Support Specialist	2	-	-	-
Technology Analyst	3	\$50,000	\$40,000	\$100,000
Web Designer/Developer	3	\$110,000	\$85,000	\$140,000
Management	2	-	-	-
Entrepreneur/Founder	1	-	-	-
Operations	1	-	-	-
Scientific Research	1	-	-	-
Biomedical (other)	1	-	-	-

*Fewer than 3 reported salaries not published to maintain confidentiality.

First Destinations by Program of Study

Bioengineering

Biotechnology (MBiotech)

Chemical & Biomolecular Engineering

Computer & Information Science

Computer & Information Technology (MCIT)

Computer Graphics & Game Technology

Data Science

Electrical Engineering

Embedded Systems

Integrated Product Design

Integrated Product Design (MSE)

Materials Science & Engineering

Mechanical Engineering & Applied Mechanics

Nanotechnology

Robotics

Scientific Computing

Systems Engineering

First Destinations by Program of Study

Bioengineering

AstraZeneca, Graduate Scientist
Electronic Arts, Software Engineer
Epic, Technical Problem Solver
Ericsson, Project Manager
Eurofins Lancaster Laboratories, Professional Scientific Services, LLC, Downstream Scientist
HighPoint Solutions, an IQVIA Company, Consultant
IQVIA, Analyst
IQVIA, Data Scientist, Consultant
Isobatic Technologies, Research Assistant
Massachusetts General Hospital, Clinical Research Coordinator II
MathWorks, Application Support Engineer
Opentrons, Associate Mechanical Engineer
Qntfy, Software Developer/Data Scientist
repisodic, inc., Contractor-Software Engineering
SQZ Biotech, Engineer
The Broad Institute of MIT and Harvard, Research Associate
University of Pennsylvania, Research Specialist
University of Pennsylvania, Research Specialist A
University of Pennsylvania, Technician
ZS Associates, Decision Analytics Associate

Biotechnology (MBiotech)

Accenture, Management Consultant
BluePrint Research Group, Associate
Bosen American Capital, Inc., Executive Manager
Cohesity, Member of Technical Staff
Deloitte, Business Technology Analyst
Deloitte, Business Technology Analyst - Life Sciences
GE Healthcare, Quality and Regulatory Leadership Program
ICON plc, Analyst
IMS Health Shanghai, Consulting Assistant
IQVIA, Analyst
Merck & Co., Inc., Associate Engineer
Perelman School of Medicine at the University of Pennsylvania, Research Specialist
Putnam Associates, Associate Consultant Level II
Roche, Business Development Intern
The Boston Consulting Group, Consulting Intern
University of Pennsylvania, Research Coordinator
University of Pennsylvania, Research Specialist

Chemical & Biomolecular Engineering

Adesis, Inc., Flow Chemistry Engineer
Amyris, Associate Scientist II, Fermentation

AstroNova, Inc., Media Test Engineer
Biochem USA, Process Development Engineer
Cofactor Group, Associate Consultant
Gartner, Business Associate
HighPoint Solutions, Analyst
Tmunity Therapeutics Inc., Associate Process Engineer

Computer & Information Science

Adobe Systems, Software Engineer
Airbnb, Software Engineer
Akuna Capital, Software Developer
Amazon, Software Developer, EC2 Core Platform, AWS
Amazon, Software Development Engineer
Amazon, Software Development Engineer
Amazon, Software Development Engineer
Amazon, Software Engineer
Amazon Lab126, Software Development Engineer
Amazon Robotics, Software Development Engineer
Apple, Business Analyst
Apple, Data Infrastructure Engineer
Apple, Machine Learning Engineer
Audible, Inc., Software Developer
Beijing Jingdong Century Trading Co. LTD, Software Engineer
Bloomberg, Software Engineer
Bloomberg, Software Engineer
Bloomberg, Software Engineer
Bloomberg, Software Engineer
Cisco, Software Engineer
Citadel LLC, Software Engineer
Cohesity, Member of Technical Staff
Comcast, Software Engineer
Facebook, Production Engineer
Facebook, Production Engineer
Facebook, Research Engineer, Artificial Intelligence
Facebook, Software Engineer
Facebook, Software Engineer
Facebook, Software Engineer
Facebook, Software Engineer
Facebook, Software Engineer
Goldman Sachs, Technology Analyst
Google, Inc., Associate Product Management
Google, Inc., Software Engineer
Google, Inc., Software Engineer
Google, Inc., Software Engineer
Google, Inc., Software Engineer
IBM, Site Reliability Engineer
Instagram, Software Engineer
IQVIA, Machine Learning Consultant

Juniper Networks, Software Engineer
Lobe Artificial Intelligence, Inc., Cofounder
Lutron Electronics Company, Inc., Senior Project Software Engineer
Lyft, Software Engineer
McKinsey & Company, Business Analyst
Microsoft, Software Development Engineer
Microsoft, Software Development Engineer
Microsoft, Software Development Engineer
Microsoft, Software Engineer
Microsoft, Software Engineer
Microsoft, Software Engineer
Microsoft, Software Engineer
Microsoft, Software Engineer
Microsoft, Software Engineer
Microsoft, Software Engineer
Microsoft, Software Engineer II
MongoDB, Software Engineer
Moody's Analytics, Software Engineer
Morgan Stanley, Technology Analyst
Nokia, Data Scientist
Nuro Inc., Software Engineer
Oracle, Member of Technical Staff
Oracle, Software Developer
Oracle, Software Engineer
PayPal, Software Engineer
Root AI, Machine Learning Engineer
SAP, Software Engineer
Twitch, Software Engineer
University of Pennsylvania, Penn Museum, Android Developer
VMware, Inc., Software Engineer
VMware, Inc., Software Engineer
Wayfair, Software Engineer

Computer & Information Technology (MCIT)

Amazon, Software Development Engineer
Amazon, Software Engineer
Amazon, Software Engineer
Audible, Inc., Software Development Engineer
Bank of America, Software Engineer
Bloomberg, Software Engineer
Bloomberg, Software Engineer
Bloomberg, Software Engineer
Bloomberg, Software Engineer
Capital One, Software Engineer
Care.com, Software Engineer II
Comcast NBCUniversal, CORE Technology Associate
Facebook, Software Engineer

Facebook, Software Engineer
Facebook, Software Engineer
Facebook, Software engineer
Facebook, Software Engineer
Google, Inc., Associate Product Manager
Google, Inc., Software Engineer
Google, Inc., Software Engineer
Google, Inc., Technical Writer
GRAIL, Software Engineer
Innovating Capital, Investor
IQVIA, Machine Learning Consultant
JRI America, Inc., Junior Software Developer
Mark43, Software Engineer
Mayo Clinic, Data Scientist
Microsoft, Software Engineer
Microsoft, Software Engineer
Microsoft, Software Engineer
Oracle, Software Engineer
Penn Medicine, Post-Doctoral Researcher
Philadelphia Phillies, Software Engineering Intern
Siemens Energy Inc., Engineer
Squishable.com, Inc., Ecommerce Associate
University of Pennsylvania, Application Developer
University of Pennsylvania Law School, App Developer & Project Lead
VMware, Inc., Member of Technical Staff
Wayfair, Business Intelligence Analyst
WillowTree Inc., Software Engineer

Computer Graphics & Game Technology

Amazon, Software Development Engineer
Baidu USA LLC, Virtual Environment Engineer
Blue Sky Studios, Research & Development Associate
Caliper, Junior Software Developer
CONFETTI Interactive, Inc., Senior Graphics Programmer
Electronic Arts, Graphics Engineer
Framestore, VR Developer Intern
Framestore, VR Developer Internship
Google, Inc., Software Engineering Resident
Kunlun Tech Co., Ltd., Beijing, China, 3D Game Engine Engineer
LAIKA, LLC, Junior Technical Director
Method Studios, Assistant Technical Director
Microsoft, Software Engineer
Microsoft, Software Engineer
Microsoft, Software Engineer
NetEase Games, Technical Artist
Pixar, Software Engineer
Shoobx, Software Engineer
Siemens Healthineers, Visualization Software Engineer

Data Science

Cohesity, Member of Technical Staff
Horizon Media, Analyst, Data Engineering
Petuum, Inc., Machine Learning Engineer
Vanguard, Machine Learning Engineer
Welligence Energy Analytics, Data Scientist

Electrical Engineering

Accion Systems, R&D Engineer
Amazon, Software Development Engineer
Analog Devices, Product Engineer
Aptiv, Localization Engineer
Boston Energy Trading and Marketing, Energy Trading Analyst
Bresslergroup, Electrical Engineer
CenTrak, Development Engineer
Citi, Software Engineer
Crossbeam, Inc., Software Development Engineer Intern
Ford Motor Company, Electrical Engineer, Advanced EE Architecture
Google, Inc., Software Engineer
KAIST Institute of IT Convergence, Research Engineer
KLA-Tencor, Research Scientist 3
Microsoft, Software Engineer
Microsoft, Software Engineer
Morgan Stanley, Associate Software Engineer
Nike, INC, Machine Learning Engineer
Novateur Research Solutions, Research Engineer
Oculiii, Hardware/Software Intern
Silead, Analog IC Design
UL, Engineer
Viasat Inc., RF Test Engineer
ZF Friedrichshafen AG, ZF Global Trainee

Embedded Systems

Apple, Software Engineer
Collins Aerospace, Software Engineer
Ghost Robot, System Engineer
Intel Corporation, Embedded Firmware Engineer
Lockheed Martin, Computer Engineer
National Grid, Snr. Software Engineer
NIO, Firmware Engineer
NVIDIA Corporation, Software Engineer
Real-Time Innovations (RTI), Software Engineer
Rivian, Connected Car Systems Engineer
Rivian Automotive, Firmware Engineer
Siemens Healthineers, Image Analytics
TA Instruments, Inc., Sr. Embedded Software Developer
Technical Consulting & Research, Inc., Web Engineer Intern

Tenna, Hardware Developer

Integrated Product Design

CardConnect, Product Strategy Manager
Fitbit, Product Manager
Google, Inc., Interaction Designer
GSK, Designer -Tech Expert Program
IA Collaborative, Design Researcher
Indeed, Design Technologist
INSITUM, Design Researcher & Strategist
OXO, Product Manager
Schneider Electric, Digital Business Design Associate
Smart Design, Strategy
Stellar, Cofounder
Stellar, Cofounder
Think Company, Experience Designer
Wondersauce, Experience Strategy

Integrated Product Design (MSE)

HTC, Mechanical Engineer
Mission Staff, UX Research Contractor
Pipedream Labs, Technical Cofounder

Materials Science & Engineering

Applied Materials, Process Engineer
Arconic, Product Metallurgical Engineer
Asurion, Business Analyst
Audible, Inc., Software Development Engineer
CCB Trust Co., Ltd., Senior Analyst
Eos Energy Storage, Quality Engineer
Evan Dolling
Facebook, Software Engineer
JRI America, Inc., Junior Software Developer
Schlumberger, Field Engineer
Tech Tube, Senior Director of Product Development and Engineering
University of Pennsylvania, Temporary Research Assistant
VMware, Inc., Member of Technical Staff

Mechanical Engineering & Applied Mechanics

Akebono Advanced Engineering LTD, Automotive Engineer
Amphenol, Project Engineer North America
Boston Children's Hospital, Medical Device Research Engineer
Duke Empirical, Inc., Project Engineer
Exyn Technologies, Mechatronics Engineer
Flexitallic, Development and Testing Engineer
Forbes Marshall, Post Graduate Trainee Engineer
Harris Corporation, Systems Engineer
Holtec International, Adjunct Project Manager

Holtec International, Business Development Engineer
Holtec International, Business Development Engineer
Integral Group, Building Analyst
Kuwait Institute for Scientific Research, Research Associate
Lockheed Martin, Systems Engineer
McMaster-Carr, Development and Design
NASA, Engineer
Plus Group Consulting Engineering, Mechanical Design Engineer
RandomWalk Technologies, Founder/ Lead Data Scientist
Siemens Energy Inc., Engineer
Stryker, Product Development Engineer
University of Pennsylvania, GRASP Laboratory, Multi-Robot Systems Laboratory, Application Developer, Mechanical Engineering & Applied Mechanics
Voltaic Systems, Testing Engineer

Nanotechnology

Honeywell, Engineering Technician III
Lockheed Martin, Member Engineering Staff
University of Pennsylvania, Quattrone Nanofabrication Facility Service Center

Robotics

Aescape, Robotics Mechanical Engineering Intern
Apple, Software Development Engineer
Apple, System Test Design Lead
Auris Health, Inc., Software Engineer
Aurora, Software Developer
Axon, Mechanical Engineering Rotational
Bank of America, Programmer
Beijing Jingdong Century Trading Co. LTD, Software Engineer
BlackRock, Aladdin Client Services - Analyst
BluHaptics, Robotics Software Engineer
Boeing, Design Engineer
Cloudwalk, CV Research Engineer
DEKA Research & Development, Junior Mechanical Engineer
Disney Imagineering, Associate Ride Mechanical Engineer
Ghost Robot, System Engineer
Goldman Sachs, Trading
Honda R&D Americas, Inc.,
Honeywell International Inc., Research Scientist II
iCueMotion LLC, Lead Computer Vision Engineer
Lockheed Martin, Research Scientist
Lutron Electronics Company, Inc., Senior Mechanical Project Engineer
Marble Robots Inc, Founding Robotics Engineer
Mayo Clinic, Data Scientist
McKinsey & Company, Digital Business Analyst
Microsoft, Mechanical Engineer
Microsoft, Software Development Engineer
Niantic, Inc., Software Engineer

Northrop Grumman, Manufacturing Engineer
NVIDIA Corporation, Mobile Robotic Software Engineer
NVIDIA Corporation, Software Engineer
Optimus Ride, Software Engineer - Perception
Orbital ATK, Systems Engineer
Peanut Robotics, Co-Founder & Robotics Engineer
PrecisionGx, Chief Technology Officer
Prototype Capital, Founder and CEO
Rakuten, Inc., Research Engineer
Rivian, Perception Engineer
Salesforce, Software Engineer
SpaceX, Mechanical Engineer
SpaceX, Structures Engineer
TSMC, Equipment Engineer
University of Pennsylvania, Director, PERCH Shops & Technical Facilities
University of Pennsylvania, Research Assistant
University of Pennsylvania, Research Assistant
University of Pennsylvania, GRASP Laboratory, Laboratory Assistant, Mechanical Engineering & Applied Mechanics
University of Pennsylvania, GRASP Laboratory, Research Assistant
West Nottingham Academy, STEM Teacher

Scientific Computing

Amazon, Software Engineer
Bloomberg, Software Engineer
Checkmate Diabetes, Chief Technology Officer
Goldman Sachs, Software Engineer
Microsoft, Software Engineer
Protective Life Insurance Company, Data Scientist

Systems Engineering

AQR, Quantitative Research Analyst
Avascent, Analyst
Baidu, Inc., Product Manager
Bain & Company, Associate Consultant
Bain & Company, Associate Consultant
Banza, Rotational Associate
Brownson, Rehms & Foxworth, Financial Analyst
Cadre, Product Manager
Chicago Trading Company, Options Trader
China Industrial Securities International Financial Group Limited,
Clarivate Analytics, Software Engineer
Coca-Cola, Management Trainee Program
Deloitte, Business Technology Analyst
Deloitte, Tech Analyst
Federal Reserve Bank of Philadelphia, Economic Analyst
Gartner, Business Associate
Goldman Sachs, Quantitative Analyst
Goldman Sachs, Software Engineer

2018 SCHOOL OF ENGINEERING & APPLIED SCIENCE



Halma, Graduate Fellow
Health Advances, LLC, Analyst
Huaying Securities, Associate
IBI Group, Analyst
JPMorgan Chase & Co., Markets Analyst
Lockheed Martin, Systems Engineer
McKinsey & Company, Business Analyst
Navigant, Consultant
Sinolink Securities, Equity Research Analyst
Tencent, Overseas Business Manager
The Boston Consulting Group, Associate
The Boston Consulting Group, Management Consultant
The MITRE Corporation, Senior Computer Science Data Analyst
Wind Information, Algorithm Engineer