Overview
Each year, Career Services surveys SEAS students who earned Master's degrees to gather information about their post-graduation plans. This report includes data from students who graduated in December 2010, May and August 2011. Information was obtained for 273 (79.8%) of the 342 Master’s degree recipients. We do not survey graduates from the Executive Masters in Technology Management Program.
Manufacturing and technology continue to be the top sectors for graduates at 51% combined. 58% of the graduates employed in manufacturing (engineering) positions were in the aerospace and biomedical/pharmaceuticals industries, as compared with 50% in 2010. In addition, candidates reporting employment in the manufacturing subcategory of Electronics/Robotics grew 7% over 2010. In all sections of this report, average salaries include respondents who were beginning full-time employment or were continuing current employment. The overall average salary for SEAS Master’s respondents was $69,430.28, a 2.9% increase over 2010.

Prepared by: Jamie Grant, Associate Director
December 2011

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Graduate Programs

Methodology
A complete list of graduating Master's students, excluding students in the Executive Masters of Technology and Management program, was provided by the SEAS Academic Programs Office. Engineering students graduating with a Master’s degree in December 2010, May and August 2011 responded to two unique email requests (one from Career Services and one from the SEAS Academic Programs Office) to complete the Career Plans Survey on the Career Services website. In December a friendly reminder to complete the survey was sent to those who had not responded to earlier requests or who had previously indicated they were still seeking employment or graduate school admission. The Penn Alumni Directory on line and LinkedIn were searched to update information from those who had not previously.

Pursuits Upon Graduation

- Full-time Employed: 62%
- Graduate School: 16%
- Continuing Current Employment: 8%
- Seeking Employment: 9%
- Seeking Graduate School: 1%
- Self-Employed: 2%
- Short-term Employment: 2%
SECTION 1 – ANALYSIS OF EMPLOYED RESPONDENTS

Geographic Distribution of Employment

<table>
<thead>
<tr>
<th>Area</th>
<th>Percent</th>
<th>Area</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td></td>
<td>Southeast</td>
<td>1%</td>
</tr>
<tr>
<td>Mid Atlantic</td>
<td>63%</td>
<td>South</td>
<td>2%</td>
</tr>
<tr>
<td>Midwest</td>
<td>3%</td>
<td>West</td>
<td>13%</td>
</tr>
<tr>
<td>Northeast</td>
<td>7%</td>
<td>Abroad*</td>
<td>8%</td>
</tr>
<tr>
<td>Northwest</td>
<td>3%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Abroad: China (7), Japan (2), Singapore (2), Colombia (1), Egypt (1), South Korea (1), Taiwan (1) and United Kingdom (1)

Employment by Industry

<table>
<thead>
<tr>
<th>Industry</th>
<th>Number</th>
<th>Industry</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technology</td>
<td>55</td>
<td>Communications</td>
<td>4</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>47</td>
<td>Design</td>
<td>5</td>
</tr>
<tr>
<td>Financial Services</td>
<td>34</td>
<td>Energy/Natural</td>
<td></td>
</tr>
<tr>
<td>Consulting</td>
<td>24</td>
<td>Resources/Utilities</td>
<td>3</td>
</tr>
<tr>
<td>Education</td>
<td>16</td>
<td>Government</td>
<td>2</td>
</tr>
<tr>
<td>Healthcare</td>
<td>6</td>
<td>Insurance</td>
<td>1</td>
</tr>
</tbody>
</table>

Employment by Industry: Manufacturing

*Other 13%*
### Employment by Job Type

#### By Job Type

<table>
<thead>
<tr>
<th>Job Type</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information Technology</td>
<td>72</td>
</tr>
<tr>
<td>Engineering</td>
<td>46</td>
</tr>
<tr>
<td>Scientific Research</td>
<td>18</td>
</tr>
<tr>
<td>Consulting</td>
<td>23</td>
</tr>
<tr>
<td>Financial Services</td>
<td>18</td>
</tr>
<tr>
<td>Marketing</td>
<td>4</td>
</tr>
<tr>
<td>Other</td>
<td>5</td>
</tr>
</tbody>
</table>

#### Employment by Job Type

*With Engineering and Information Technology Subcharts*

- Information Technology: 39%
- Engineering: 25%
- Scientific Research: 9%
- Consulting: 12%
- Financial Services: 10%
- Marketing: 2%
- Other: 3%

#### Engineering

- Research & Development: 33%
- Manufact./Production: 20%
- Project Mgmt: 2%
- Design: 28%
- Systems: 11%
- Construction: 2%
- Tech. Director: 6%
- Tech. Support Specialist: 3%
- Data Analyst/Admin: 5%

#### Information Technology

- Software Developer/Engineer: 54%
- Systems Engineer/Analyst: 12%
- Program Manager: 3%
- Network Engineer: 1%
- Programmer: 6%
- Tech. Analyst: 10%
- Tech. Support Specialist: 3%
### Range and Average Number of Job Interviews of Respondents

<table>
<thead>
<tr>
<th>Range and Average Number of Job Interviews of Respondents</th>
<th>Range</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>On-Campus Recruiting (OCR) Interviews</td>
<td>1 - 35</td>
<td>6.3</td>
</tr>
<tr>
<td>Interviews Resulting from Career Services Leads (Career Day, Job Postings, PennLink)</td>
<td>1 – 30</td>
<td>3.8</td>
</tr>
<tr>
<td>Interviews on Their Own</td>
<td>1 – 50</td>
<td>4.9</td>
</tr>
<tr>
<td>All Interviews Combined</td>
<td>1 – 54</td>
<td>9.8</td>
</tr>
</tbody>
</table>

### Range and Average Number of Offers of Respondents

<table>
<thead>
<tr>
<th>Range and Average Number of Offers of Respondents</th>
<th>Range</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>On-Campus Recruiting Offers</td>
<td>1 – 6</td>
<td>1.9</td>
</tr>
<tr>
<td>Career Services Offers (Career Day, Email Postings, PennLink)</td>
<td>1 – 6</td>
<td>1.5</td>
</tr>
<tr>
<td>Offers from Sources other than OCR and Career Services</td>
<td>1 – 4</td>
<td>1.3</td>
</tr>
<tr>
<td>All Offers Combined</td>
<td>1 – 8</td>
<td>2.1</td>
</tr>
</tbody>
</table>

### Range and Average Salary of Respondents

The range of salaries reported for 2011 was $24,000 - $110,000.

The average salary for graduates in full-time positions and those continuing current employment was $69,430, which is an increase of 2.9% from the previous year.
# List of Employers by Major

## Bioengineering
- Bain Capital, Sankaty Advisors, Analyst, Boston, MA
- Bristol-Myers Squibb, Product Development Engineer, Princeton, NJ
- Chevron Energy Solutions, Strategy Analyst, San Francisco, CA
- ClearView Healthcare Partners, Analyst, Boston, MA
- Ginkgo Bioworks, DNA Padawan, Boston, MA
- GlaxoSmithKline, Quantitative Sciences, Medicines Discovery, Computational Biologist/Intern, King of Prussia, PA
- Inventor Labs, Design Engineer, Redwood City, CA
- Nomura Asset Management, Asset Management, Analyst, Tokyo, Japan
- PRTM, Life Sciences Division, Consultant, New York, NY
- Synthes, Product Development/Manufacturing, Engineering Associate, West Chester, PA
- The Research Partnership, Research Analyst, Allentown, PA
- University of Pennsylvania Health System, Anesthesiology and Critical Care, Laboratory Technician, Philadelphia, PA
- ZL Technologies, Business Development and Marketing Associate, San Jose, CA
- ZS Associates, Operations Research Associate, Chicago, IL

## Biotechnology
- A2Z-OC Research & Development (An Amazon Company), Software Engineer, New York, NY
- Accenture, Analyst, Reston, VA
- Boston Biomedical Consulting, Market Analyst, Boston, MA
- Boston Consulting Group, Consultant, San Francisco, CA
- Clearview Healthcare Partners, Analyst, Boston, MA
- Covance, Inc., Clinical Development Services, Registry Research Assistant, Conshohocken, PA
- Eli Lilly and Co., Quality Control Information Technologies, Systems Analyst, Branchburg, NJ
- EMBL-EBI, Functional Genomics, Data Manager, Cambridge, MA
- Euroimmun US, Junior Product Manager, New York, NY
- Extera Partners, Senior Manager, Cambridge, MA
- Follica, Senior Research Associate, Philadelphia, PA
- GlaxoSmithKline, Manufacturing Specialist, Philadelphia, PA
- GlaxoSmithKline, Biopharmaceuticals, Scientist, King of Prussia, PA
- GlaxoSmithKline, Biopharmaceutical Manufacturing, Manufacturing Specialist, Conshohocken, PA
- Hospital of the University of Pennsylvania, Pulmonary, Allergy and Critical Care, Research Specialist A, Philadelphia, PA
- IBM, Client Technical Specialist Trainee, New York, NY
- IMS Health, Consumer Effectiveness Services, Analyst, Collegeville, PA
- IMS Health, Title Not Provided, Collegeville, PA
- L.E.K. Consulting, Associate, New York, NY
- Lockheed Martin, LMIV, Senior Research Associate, Rockville, MD
- Merck, Associate Scientist, Union, NJ
- Merck, Senior Engineer, West Point, PA
- Merck, Process and Formulation Technology, West Point, PA
- Navigant Consulting, Life Sciences Division, Consultant, New York, NY
- Novartis, Scientific Associate, Boston, MA
- Penn Genome Frontiers Institute, Technician, Philadelphia, PA
- Pfizer, Research Intern, Kalamazoo, MI
- Princeton Pharmaceutical, Support Engineering, BD Specialist, Cranbury, NJ
- Regeneron Pharmaceuticals, Infectious Diseases, Research Associate II, Tarrytown, NY
- The Children's Hospital of Philadelphia, Dept. of Oncology, Clinical Study Collaborator, Philadelphia, PA
- The Wistar Institute, Research Assistant, Philadelphia, PA
- University of Pennsylvania Perelman School of Medicine, Clinical Epidemiology, Biostatistics, Research Specialist, Philadelphia, PA
- University of Pennsylvania Perelman School of Medicine, Department of Genetics, Research Specialist, Functional Genomics Core, Philadelphia, PA
- University of Pennsylvania Perelman School of Medicine, Penn Vector Core, Research Specialist, Philadelphia, PA
- University of Pennsylvania Perelman School of Medicine, Inst. for Translational Medicine & Therapeutics, Clinical Research Coord., Philadelphia, PA
- University of Pennsylvania Perelman School of Medicine, Sequencing Core Technician, Philadelphia, PA

## Chemical and Biomolecular Engineering
- Bloom Energy, Ink Manufacturing Engineer, Sunnyvale, CA
- Merck, Automation Engineering, Associate Automation Engineer, West Point, PA
- Schlumberger, Field Engineer, Longview, TX
- Seraphim Life Sciences Consulting, Affiliate Consultant, Vienna, VA
- Teach Pakistan Initiative, Project Director, Philadelphia, PA
Computer & Information Technology
Angel, Quality Engineer, Washington, DC
Bloomberg LP, Financial Software Developer Trainee, New York, NY
DramaFever Corp., Software Engineer, Narberth, PA
Goldman Sachs, Technology, New Associate Programming Analyst, Jersey City, NJ
Hewlett-Packard, IPG, Software Engineer, San Diego, CA
Kaiser Permanente, Information Technology, Developer, Pasadena, CA
Pixar, Technical Director Resident, Emeryville, CA
SAP, Support Engineer, Newtown Square, PA
University of Pennsylvania School of Nursing, Sr. Network Engineer, Philadelphia, PA
WebSiteText, LLC, Owner, Yardley, PA
ZS Associates, Business Information Specialist, New York, NY

Computer and Information Science
Ajungo, Software Engineer, Philadelphia, PA
Amazon, Web Service, Software Developer Engineer, Seattle, WA
Analytical Graphics, Inc., Development, 3D Software Engineer, Exton, PA
Barclays Capital, Technology, Analyst, New York, NY
Bloomberg LP, Financial Software Developer Trainee, New York, NY
Citigroup, Quantitative Analyst, Philadelphia, PA
Epic Systems, Software Developer, Madison, WI
Facebook, Software Engineer, Palo Alto, CA
Goldman Sachs, Technology, Technology Analyst, Jersey City, NJ
Goldman Sachs, Associate, New York, NY
Goldman Sachs, Technology Analyst, New York, NY
Google, Software Development Engineer, New York, NY
Google, Business System Integrator, Mountain View, CA
GSI Commerce, Engineer, King of Prussia, PA
Lockheed Martin, IS&GS, Software Engineer, King of Prussia, PA
Microsoft, Software Engineer in Test, Redmond, WA
NAVTEQ, Sr. Software Engineer, Malvern, PA
NVIDIA, Tegra/Android, System Design Engineer, Santa Clara, CA
Oracle, Technical Staff, Exadata Management, Redwood City, CA
TCL Research America, Software Engineer, Santa Clara, CA
Twitter, Software Engineer, San Francisco, CA
Two Sigma Investments, Software Developer, New York, NY
University of Pennsylvania Perelman School of Medicine, Senior Programmer Analyst, Philadelphia, PA
University of Pennsylvania Perelman School of Medicine, Pathology & Laboratory Medicine, Data Analyst, Philadelphia, PA

Computer Graphics and Game Technology
Blue Sky Studios, Graphics / Animation, Character Simulation Technical Director, Greenwich, CT
DreamWorks Animation, Technical Director, Glendale, CA
DreamWorks Animation, Department Technical Director, Glendale, CA
GE, NTI, Lead Software Engineer, Billerica, MA
Pixar, Technical Director, Emeryville, CA
Pixar, Title Not Provided, Emeryville, CA
Tencent Games, Title Not Provided, Shenzhen, China
Zynga, Software Engineer, San Francisco, CA
Zynga, Software Engineer, Baltimore, MD

Electrical Engineering
Applied Energy Systems, Controls Engineering, Controls Engineer, Malvern, PA
Bank of America Merrill Lynch, Investment Banking Technology, Technology Analyst, Jersey City, NJ
Bloomberg LP, Software Developer, New York, NY
Citic Securities Co., Ltd., Investment Banking, Senior Associate, Beijing, China
Citigroup, Investment Banking/Business Technology, Analyst, New York, NY
Credit Suisse, Business Analyst, New York, NY
Cummins, Inc., Electronic System & Architecture, Electronic Control Architect, Columbus, IN
Employer Not Provided, Title Not Provided, Location Not Provided
Employer Not Provided, Title Not Provided, City Not Provided, NJ
Employer Not Provided, Title Not Provided, Location Not Provided
Inductis, Decision Analytics, New York, NY
Johnson Controls, Automotive Experience, Software Test Engineer, Holland, MI
klingstubbins, Associate Electrical Engineer, Philadelphia, PA
Linkquest, Inc., Title Not Provided, San Diego, CA
Lockheed Martin, Title Not Provided, Moorestown, NJ
NextFab Studio, Electrical Engineer, Philadelphia, PA
Oracle Corporation, Software Developer, Singapore,
Electrical Engineering continued
Raytheon, Rotational Engineering Leadership Development, Marlborough, MA
Texas Instruments, ASP, Electrical Engineer, Dallas, TX
University of Pennsylvania, Games/Simulation Programmer, Knowledge Eng., Philadelphia, PA
University of Pennsylvania, CERN, Research Assistant, Philadelphia, PA
University of Pennsylvania Dept. of Physics and Astronomy, Research Assistant, Philadelphia, PA
Xi Software, Programming Analyst, Jersey City, NJ

Embedded Systems
Prudent Infotech, Software Developer, Newark, DE

Integrated Product Design
Definitive Design Corporation, Design Engineer, Philadelphia, PA
Design Science, Research Associate, Philadelphia, PA
Fair Observer, Product Manager, Boston, MA
Gensler, Architectural Designer, Washington, DC
Guangzhou Xinye Hide Products, Ltd., Development Advisor, San Francisco, CA
Smart Design, Freelance Design Engineer, Philadelphia, PA

Materials Science and Engineering
Accenture, Systems Integration Analyst, San Francisco, CA
Chemtex Group, Project Engineer, Wilmington, NC
Employer Not Provided, Title Not Provided, Location Not Provided
ISE Labs, Inc., Failure Analysis Intern, Fremont, CA
Mamiba Cosmetics, Assistant Business Development Manager, Cairo, Egypt
MediaTek, Inc., Circuit Technology R&D Engineer, Hsinchu, Taiwan
Micron Technology, Diffusion Process Engineering, Shift Engineer, Manassas, VA
Sinosteel, Trading, Trader, Beijing, China
SpaceWorks Enterprises, Inc., Commercial, Space Ventures Analyst, Washington, DC
UBS, Analyst, New York, NY

Mechanical Engineering & Applied Mechanics
Axiom SL, Analyst, New York, NY
Bank of America Merrill Lynch, Market Risk Manager, New York, NY
Johnson Controls, Automotive Experience, Software Test Engineer, Holland, MI
Momentum Dynamics, Mechanical Engineer, Malvern, PA
Self-Employed, Organization Not Provided, Title Not Provided, Location Not Provided
Start-up Organization (not yet named), Co-founder and General Manager, Beijing, China
State Administration of Foreign Exchange, Investment Management Analyst, Beijing, China
The Boeing Company, Structural Analyst, Philadelphia, PA
The Boeing Company, Mechanical and Structural Engineering, Structural Analysis Engineer, Ridley Park, PA
The Boeing Company, Enterprise Engineering Support Group, Structural Analysis, Philadelphia, PA
The Boeing Company, Structural Design and Analysis, Structural Design and Analysis Engineer, Ridley Park, PA

Robotics
Bank of America, Technology Associate, Pennington, NJ
Bossa Nova Robotics, Research and Development, Mechanical Engineer, Pittsburgh, PA
Employer Not Provided, Title Not Provided, City Not Provided, CA
Mitsubishi Heavy Industries, Integrated Systems Section, Engineer, Komaki, Aichi, Japan
Robotic Research, LLC, Junior Engineer, Gaithersburg, MD
Robotic Research, LLC, Engineer, Gaithersburg, MD
Robotics Redefined, Robotics Engineering, Engineer, Saint Paul, MN
SAMSUNG Techwin, IMS, Computer Vision Software Designer/Developer, Seoul, South Korea
Thermoanodina, Engineering, Design Engineer, Bogota, Colombia
UBS, Investment Banking Information Technology, Software Developer, Stamford, CT

Systems Engineering
Barclays Capital, FX Trader, New York, NY
Barclays Capital, Investment Banking, Analyst, New York, NY
BlackRock, Portfolio Risk, Analyst, Wilmington, DE
China Pacific Insurance Company, Business Administrator, Shanghai, China
Citigroup, Risk Management, Analyst, New York, NY
Fifth Street Finance Corp., Associate, New York, NY
First Manhattan Consulting Group, Analyst, New York, NY
Insight Venture Partners, Analyst, New York, NY
Johnson Electric, Strategic Marketing, Officer, Hong Kong,
Lockheed Martin, MS2, Engineering Staff, Moorestown, NJ
Systems Engineering continued
Morgan Stanley, Internal Audit, Analyst, New York, NY
Ninah Consulting, Senior Associate Consultant, New York, NY
Oracle, Fusion Application Developer, Redwood Shores, CA
Singapore Armed Forces, Navy, Combat System Engineer, Singapore,
Susquehanna International Group, Technical Associate, Bala Cynwyd, PA
The United States Department of Defense, Technical Lead, Ft. Meade, MD
Vanguard Group, Defined Benefits, Developer, Malvern, PA
ZS Associates, Associate, Princeton, NJ

Telecommunications and Networking
Bank of America, Technology Analyst, Charlotte, NC
Bank of America, Credit Risk Technology, Technology Analyst, Jersey City, NJ
Barclays Capital, Technology, Technology Analyst, New York, NY
Bloomberg, Financial Software Developer, Philadelphia, PA
Catapult.com, Lead Algorithm Developer, Seattle, WA
China International Trust and Investment Corporation, Investment Banking, Associate, Beijing, China
comScore, Inc., Software Engineer, Reston, VA
Deloitte Consulting, Business Technology Consulting, Business Technology Analyst, Philadelphia, PA
DramaFever, Software Engineer, Philadelphia, PA
eBay, Software Engineer, Philadelphia, PA
Empirical Research Partners, LLC, Quantitative Analyst, New York, NY
Ericsson, Engagement Practices (EP), Solutions Architect-I, Plano, TX
Linguistic Data Consortium, Perl Programmer, Philadelphia, PA
Lokalty Inc., Co-Founder, Philadelphia, PA
Microsoft, Online Services Division, Program Manager, Bellevue, WA
Microsoft, Program Manager, Redmond, WA
Modell’s Sporting Goods, Marketing Intern, New York, NY
Morgan Stanley, Analyst, New York, NY
NetApp, Software Engineer, Sunnyvale, CA
PwC, Consultant, New York, NY
SRI International, Engineering Services Group, IT Support / Software Development Engineer, Helena, MT
Sun Microsystems, Title Not Provided, Santa Clara, CA
SysMind LLC, Programmer Analyst, Princeton Junction, NJ
UBS Financial Service, Software Engineer, Philadelphia, PA
University of Pennsylvania, Linguistic Data Consortium, Programmer, Philadelphia, PA
University of Pennsylvania, Center for Advanced Study of India, Database Administrator, Philadelphia, PA
### Bioengineering
- Emory University/Georgia Institute of Technology, Atlanta, GA: PhD, Bioengineering
- Harvard-MIT Division of Health Sciences and Technology, Cambridge, MA: MD/PhD, Bioengineering
- Johns Hopkins University, Baltimore, MD: PhD, Medical Engineering/Medical Physics
- Stanford University, Stanford, CA: PhD, Biochemistry
- University of California, San Diego, La Jolla, CA: PhD, NanoEngineering
- University of Pennsylvania, Philadelphia, PA: PhD, Bioengineering
- University of Southern California, Los Angeles, CA: PhD, Biomedical Engineering

### Biotechnology
- Drexel University College of Medicine, Philadelphia, PA: PhD, Biochemistry
- Lake Erie College of Osteopathic Medicine, Erie, PA: DO, Medicine
- The Pennsylvania State University, Hershey, PA: PhD, Neuroscience
- University of Pennsylvania, Philadelphia, PA: PhD, Pharmacology
- Yale University, New Haven, CT: PhD, Immunology

### Chemical and Biomolecular Engineering
- University of Pennsylvania, Philadelphia, PA: PhD, Chemical and Biomolecular Engineering
- University of Pennsylvania, Philadelphia, PA: PhD, Chemical and Biomolecular Engineering
- University of Pennsylvania, Philadelphia, PA: PhD, Chemical and Biomolecular Engineering
- University of Pennsylvania, Philadelphia, PA: PhD, Chemical and Biomolecular Engineering
- Virginia Polytechnic Institute and State University, Blacksburg, VA: PhD, Chemical Engineering

### Computer and Information Science
- University of Pennsylvania, Philadelphia, PA: PhD, Computer and Information Science
- University of Pennsylvania, Philadelphia, PA: PhD, Computer and Information Science
- University of Pennsylvania, Philadelphia, PA: PhD, Computer and Information Science
- University of Pennsylvania, Philadelphia, PA: PhD, Computer and Information Science
- University of Pennsylvania, Philadelphia, PA: PhD, Computer and Information Science
- University of Pennsylvania, Philadelphia, PA: PhD, Computer and Information Science
- University of Pennsylvania, Philadelphia, PA: PhD, Computer and Information Science
- University of Pennsylvania, Philadelphia, PA: PhD, Computer and Information Science

### Electrical Engineering
- University of California, Berkeley, Berkeley, CA: PhD, Electrical Engineering
- University of Pennsylvania, Philadelphia, PA: PhD, Electrical Engineering
- University of Virginia, Charlottesville, VA: PhD, Computer Engineering

### Materials Science and Engineering
- Rutgers University, NJ: PhD, Subject Not Provided
- University of Pennsylvania, Philadelphia, PA: PhD, Materials Science and Engineering
- University of Pennsylvania, Philadelphia, PA: PhD, Materials Science and Engineering
- University of Pennsylvania, Philadelphia, PA: PhD, Materials Science and Engineering

### Mechanical Engineering & Applied Mechanics
- Carnegie Mellon University, Pittsburgh, PA: PhD, Robotics

### Nanotechnology
- Stanford University, Stanford, CA: PhD, Physics

### Robotics
- Drexel University, Philadelphia, PA: PhD, Computer Science
- Osaka University, Osaka, Japan: PhD, Robotics Engineering
- University of Pennsylvania, Philadelphia, PA: PhD, Electrical Engineering
- University of Pennsylvania, Philadelphia, PA: PhD, Electrical Engineering

### Telecommunications and Networking
- University of Pennsylvania, Philadelphia, PA: PhD, Computer and Information Science