"What are the most rewarding aspects of your job?"

Physicists in the Private Sector

PhDs educated in the US 10-15 years earlier

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About the Study

The PhD Plus 10 Study was designed to examine the longer-term employment of physics doctorates. While the initial employment of physics PhDs is studied regularly by the American Institute of Physics, data about mid-career PhD physicists remain scarce. This study was conducted to fill that gap in our knowledge. It identified physicists who earned their PhDs in the US during 1996, 1997, 2000, and 2001, and collected data from those who could be located and who were employed in the US in 2011. The data from this midcareer study supplement the initial employment data. The PhD Plus 10 Study was funded by the American Institute of Physics (AIP) and was conducted by the AIP Statistical Research Center (SRC).

Of the mid-career physicists who responded to the PhD Plus 10 Study, 503 were employed in the US private sector. This document is part of a set of reports about those physicists. A data-rich report titled *Common Careers of Physicists in the Private Sector* is available on the SRC website. That report identifies eight types of careers commonly pursued by PhD physicists in the private sector in the US. It includes detailed profiles of what mid-career physicists do in each of those types of careers.

This document complements the data-rich report. It is a compilation of the comments that mid-career physicists wrote in response to the open-ended question: "What are the most rewarding aspects of your job?"

The comments listed here will provide the readers with an appreciation for the breadth and variety of statements made by physicists about the aspects of their jobs that they found most rewarding. As reflected in the Table of Contents, the comments are organized into the eight types of careers that are commonly pursued by PhD physicists in the private sector in the US. Some themes appear across most or all of the eight types of positions, e.g. "my job is intellectually challenging" or "I work with very smart and interesting people". Other comments appear to reflect unique features of specific sectors of the economy.

This document is a valuable resource that permits physicists to speak for themselves. However, readers should not view this document as an accurate reflection of the most common themes cited by respondents. In fact, we deleted some comments that were repetitive in order to make the information more concise.

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Self-employed

Ability to work with open source and the community surrounding it, e.g. contributing to other projects. Ability to work on a team of skilled professionals. Working with latest tools and current technology stacks. Working with fun and interested people. Having a say in the outcome of the application being developed and sharing in the rewards financially.

Building a business.

Creative problem solving in computation. Collaborating with interesting people. Travel to Interesting places. Opportunity for personal growth.

Developing new devices using knowledge I have accumulated over past years.

Diversity of problems, solving problems/rescue.

Flexibility to manage my own research interests and my own schedule with young children at home.

Growing a great company that I founded.

I don't have to work for other people anymore.

I get to work on a wide variety of interesting problems. As a consultant, it's OK to work for struggling companies who are more likely to have challenging problems.

Leading is similar to teaching, and I have some spare time to develop physics ideas.

Progress and working with extraordinary people. Ability to benefit society.

Satisfaction of creating a viable, sustainable company that can provide a real service to the scientific and engineering community, helping customers, support employees with unique and enjoyable work, personal compensation, providing good work for vendors, being a good business (paying bills on time, etc.), having a work life that supports a balanced personal life (working less than 40 hours per week, no weekend work, little travel, etc.), working with optics.

Self-direction. Direct interaction with clients. Clear impact on others' lives. Flexible schedule.

The intellectual freedom and resources, including coworkers.

The opportunity to create something useful, tackling important elements of an important issue, autonomy, and multidisciplinary work.

Self-employed (page 2 of 2)

The fact that all my endeavors, whether they are glorious and challenging (solving basic research problems) or small and annoying (paying the phone bill) advance my own cause. There is very little time wasted on matters which do not concern me directly. Of course, this is also part of the difficulty of the job, that I am ultimately responsible for my own success or failure, regardless of whether or not I have control over all the issues!

There are three rewarding aspects: 1. Applying my technical skills to solve real-world problems 2. Influencing the direction of programs, projects, and research and 3. Aiding other technically gifted people to develop their skills and understand how to apply them in the aerospace industry.

Trying to build and produce a new kind of technology is great fun.

Unstructured time commitments.

Work for myself, build my own company, follow my own interests.

Working for myself. Providing solutions for customers.

Working with a technology I developed in a company I founded.

Finance

Having to solve new interesting problems on a regular basis - Interacting with other researchers with different scientific backgrounds (math, economics, engineering) and getting exposure to different points of views and ideas. - The pay is good, and the atmosphere is healthy.

1) highly remunerative. 2) very flexible, academic environment.

Ability to learn what analytical approaches different banks utilize and to apply own knowledge to support actual business needs.

Ability to solve complex problems.

Achievement with finished product/system after meeting all challenges.

Being in a position where I have considerable input in planning major projects and executing them. Learning to manage very capable people has been an interesting challenge.

Challenging problems.

Development of complex Monte Carlo pricers of exotic derivatives based on stochastic models, learning various models for asset dynamics that is quite mathematically involved.

Direct financial reward to successful projects, constantly challenged, freedom to innovate and develop my own ideas.

Doing research on intellectually challenging projects, and then seeing our clients use these results.

Financial independence.

High pay for limited working hours.

Interesting and challenging work, good balance of math and computational work, exciting work environment, financially rewarding.

Interesting mathematical work, good colleagues.

Limitless possibilities to apply model creation and research skills in highly dynamic systems with a copious number of observables.

Making investment decisions.

Finance (page 2 of 2)

Money, great research environment, people, flexibility.

Overcoming technical difficulties of writing fast software.

Problem solving, working with a group of smart people.

Research of fast changing markets. The impact that I and my team have on organization and the industry.

Risk and reward.

Since I work to support a global trading organization, the environment is very dynamic. The traders are always looking to trade new commodities / contracts that keep us quite challenged to make sure that those contracts are modeled properly in our systems.

Successful problem-solving against a backdrop of highly-variable conditions. Explaining complex goals and ideas in clear terms that can allow hundreds of people to collaborate effectively.

Using math and intuitive thinking to solve real world complex problems is always fun.

Variety, autonomy.

Working in cutting edge finance and working on addressing client's financing and balance sheet issues.

Working on challenging problems with highly capable scientists and engineers.

Working with a large portfolio of young companies with great people and products

Government Contractors

1. Global travel for measurements and conferences 2. Working with cutting-edge technology 3. Flexible work schedule when not traveling.

Applying physics and mathematical models to the design of systems that become real technology.

Being involved in developing and fielding products that defend our service personnel.

Being looked to as the technical decision authority, developing new concepts/solutions, making presentations, relative autonomy.

Contributing to the solution of real-life problems. Interacting with clients and colleagues.

Development of real hardware. Professional growth of staff. Financial.

Doing the research and development. Developing test plans, directing tests.

Ensure long-term viability and success of nationally important programs.

Freedom to pursue new research, recognized for achievements, employer's support of work-life balance.

Generating and implementing interesting ideas. Learning about new technical areas.

Get to pick my own research projects and I get to work with the latest Mars orbiter data on a daily basis.

Helping shape direction Missile Defense Program takes.

I get to work on my own projects with little or no supervision. I get to study new fields according to my own curiosity.

I like the people I work with, and the atmosphere is pleasant.

I made a conscious choice to move toward the energy field a few years ago because I think that is the most important scientific and social challenge facing our society today. So I am learning a new field and it is extremely rewarding to be working in something that is personally meaningful and beneficial to society. I also LOVE my job because I get to learn about new technologies all the time, talk to people from all backgrounds and diverse work experiences both within and outside my company. I also work with an amazingly smart, dedicated and fun group of people. I couldn't be happier.

Government Contractors (page 2 of 3)

I support (oversee) diverse research projects and carry them from proof of concept to testable prototype detectors. Seeing the results of long labor to bring increased detection capability is very satisfying. It is also satisfying to be able to review proposals and serve as a decent gateway for ideas.

I work with a diverse group, to include other PhDs in other disciplines. The projects I work on change several times a year, providing variety to my work. The people I work with on a daily basis are fun colleagues.

I've gotten to see things that most people will never get to see.

It is rarely boring and never repetitive.

Making the work environment the way I want it to be.

Mentoring and the opportunity for insightful design guided by physical principles. Also, while the majority of employees are engineers, many have sophisticated science and mathematical backgrounds, so there is quite a lot of informal learning possible.

My job description varies from project to project, but those in which my skills in mathematics are used the most are the most rewarding.

Opportunity to work on challenging yet relevant problems.

Participation in multiple advanced research opportunities in interesting areas.

Performing basic problem solving for new issues on a somewhat regular basis.

Problem solving and creating things of value.

Producing products that are used to make major governmental investment decisions.

Providing technical inputs/advice that drive decision makers.

Research, algorithm development, mathematical derivations, computer coding.

Respect in community, influence over broad activities.

Seeing my ideas put into action.

Seeing our design and development efforts lead to a working system. Working in the cutting edge of our field. Mentoring younger colleagues.

Government Contractors (page 3 of 3)

Solving complex problems and effecting national defense.

Solving problems and working with people/organizations.

Successful technology development.

The professional atmosphere

Thinking about high-level physics and math almost every day and working with some extremely intelligent colleagues.

Unfortunately, right now, it's the paycheck. Occasionally, I experience some satisfaction from solving a small technical problem or from taking the initiative to document the team's work, when I know no one else will do it.

Variety and freedom. Even though my research is dictated by the needs of others, I make sure they know what their needs are.

When technology that we develop becomes fielded in an operational system it makes a real difference in the world.

Wide variety of projects, significant role in design, ability to investigate semiconductor device physics in novel devices, local experts to consult.

Working alongside other highly technical engineers and scientist, and investigating and characterizing new and interesting materials and devices.

Working cutting edge designed systems.

Working on a motivated team.

Working with a team of physicists, engineers and mathematicians to develop advanced concept solutions to multidisciplinary problems.

Working with strong technical colleagues.   Successful design and analysis.

Industry - Primarily Engineering

(1) I respect my colleagues and enjoy their company. (2) Monetary compensation.

Finding good correlation between theory and experiment. -Keeping up with the current research.

Freedom to perform research -relaxed work atmosphere/rules -working for the leader in the field.

1) finding a cost-effective solution for a complex problem 2) drive equipment design for next-generation customer needs

1. Working with my colleagues. 2. Opportunity to do Atmospheric Physics and Chemistry.

Achieving new performance levels with newly developed processes.

Achieving sensible (or repeatable) experimental results.

Advancing the state of the art in production capable solar cells.

Be able to design and implement my ideas from scratch to completion and contribute significantly to the company's success.

Be responsible for all aspects of the programs / projects / products, both technically and non-technically.

Being able to move to new fields and projects, if needed.

Being part of a high performing team that is building a startup into a successful and important company. Teaching people who are less experienced and less senior to me what I know to make them more capable and more effective. Most of all, learning a variety of different things, such as becoming more proficient at managing people or understanding patent law. I find the most general skills are the most useful. Being good at managing people at work isn't that different from raising children or having good relationships with family members. Project management skills come in handy when planning a wedding or buying a car. Critical thinking is useful when evaluating potential investments.

Building large scale networks that provide the fundamental transport mechanism for the Internet. Developing new solutions for customer issues.

Building new research programs and mentoring new team members.

Industry - Primarily Engineering (page 2 of 7)

Calculations involving basic physics, design, testing.

Certain degree of work flexibility, exposure to customers with various technical challenges.

Challenging projects which require real scientific detective work to solve and bring about real world products. Excellent community of scientists and facilities to work with. Great teams to work on with a broad spectrum of different backgrounds and abilities.

Challenging technical problems, moving a whole team of engineers in a common direction to achieve a goal, having to constantly learn new things in order to interface with engineers of a wide variety of subspecialties.

Chance to develop cutting edge technology.

Collaboration with colleagues, satisfaction at creating new instruments/processes, respect from peers and others in company.

Company success.

Conducting excellent research with a team, from proposal to final report or technical demonstration. Success in R&D.

Contribute to business success (revenue).

Contributing to health products.

Contributing to technology which changes the world.

Contributing to the betterment of the company (revenue, culture, infrastructure, knowledge). Running a team and learning more about operations. Solving complex problems. Acknowledgement at the VP level of management of my contributions.

Converting abstract ideas into practical devices constantly trying new things learning new things.

Create new advanced products that never existed until our team made them happen. To remain technologically far above the competition.

Daily work meaningfully translates into success of the business.

Deciding on your product architectures that make business sense.

Industry - Primarily Engineering (page 3 of 7)

Delivery of results with high-impact on the company's operational success.

Designing avionics. I like the discipline and the applications.

Diverse areas of engineering, delivery of products.

Finding new research and development opportunities, going after them (writing proposals, teaming with other companies), and leading the new projects that we win. Being in the position to push the research and development focus of the company forward into new areas.

Flexible hours, interesting work, stock options, not too much pressure.

Flexible, interesting, non-repetitive, could benefit the human kind.

Generally the people I work with. The problems are not terribly difficult. The pay is also quite nice since it allows me to pursue other interests outside of work.

Getting new customers!

Hardware and software design experience.

Having opportunity to apply knowledge learned in school.

Helping people/patients improve the quality of their lives.

Helping the customer solve problems with our equipment, and training other employees.

Highest technical honor inside the company, well respected by people inside and out.

I do get to work with some good people and help work on some interesting issues in fab processing.

I enjoy interacting with customers to understand their problems and provide and implement solutions.

I get to see the application of my work. I have an identifiable contribution to the success of my company and its customers.

I have experienced the whole startup process from initial application of research topics to practical problems, to developing a commercially viable product, to supporting that and enhancing it over 10+ years. There continue to be interesting intellectual challenges, as well as the challenge of building and maintaining a successful development team.

Industry - Primarily Engineering (page 4 of 7)

I participate in development of a new, complex technology. I have a well-paid full-time job at a location that I like, in a small R&D office staffed by people I have worked with for many years. The job requires a fairly rare combination of skills and experience in electronic imaging, experimental physics research, and algorithm and software development, which I happen to have. I do not have to beg for government money to get things done.

I work in solar industry, and I believe that alternative energy is important for humankind. My job is technically challenging and provides many opportunities for learning.

I'm in a hot field right now, so business is booming.

Intellectually stimulating, working with smart people, interacting with people who use our products. The products which I help invent and develop are used in real world settings in the development of better chemicals, new and better drugs, etc. (e.g. it feels good to have some impact on current real world challenges).

Interacting with a diverse range of people.

Interactions with domestic and international technical people within my field.

Inventing new technologies and being in a position to control resources to make them come to life. Leading research and development programs and seeing them to completion. Assessing new technologies from other companies and institutions.

Knowing that the computer chips I produced are in computers around the world.

Leading and working with a team to develop world leading recording technologies.

Learning knowledge and skills outside pure physics.

Learning something new every day.

Level of responsibility, active participation equity participation.

Making daily improvement and impact to a global organization.

Making medical imaging products.

Making products that have direct impact on people's lives out the door.

Making progress on theoretical aspects of the job.

Industry - Primarily Engineering (page 5 of 7)

Measurements and computations leading to improved understanding, improved device performance, new inventions of devices.

Mentoring junior engineers and seeing them grow in their careers.

Mixing business with science.

Money, intellectual stimulation, satisfaction of designing and fabricating a complex electronic device.

New technology research and development new machinery using newest technology.

Novel technology based on silicon nanocrystals. Technical challenges bringing a new technology to market.

Novelty of issues to solve, good team work, and data-driven decision making process.

Own several patents.

Physics mindset.

Problem solving, working with professionals from other disciplines (chemistry, EE, ME, CS), very supportive workplace.

Providing a reliable and sophisticated software product with a long lifetime used my many people throughout the world.

Providing technical and business leadership to a stellar team of engineers and scientists. Delivering products that including "bleeding edge" technology yet are manufacturable and profitable. Providing overall leadership and championship to my company overall. Solving or helping my team to find solutions to problems every day, quickly, and cost-effectively. Having a great variety of experiences in my work life, including travel and learning about customers and their requirements.

Self-direction, need for creativity and innovation to solve critical business problems , noble purpose--my company makes money by saving lives and reducing property damage due to motor vehicle accidents.

Salary, camaraderie, intellectual stimulation.

Seeing others use the results of my work.

Industry - Primarily Engineering (page 6 of 7)

Significant responsibility for and contribution to future technologies that directly affect everyone's daily lives.

Solving challenging problems and working with a competent and personable technical team.

Solving difficult problems and seeing the results go into use quickly by our customers. Also, the work is based around an open source software project, so there is a sense of collective contribution and ownership.

Solving difficult problems in order to make the production of aircraft engine parts much more efficient.

Solving problems of immediate importance to other people. Interacting with people from diverse educational, ethnic, cultural backgrounds. Mentoring others.

Solving problems on cutting edge technology and equipment while at the same time, solving other problems on less advanced technology. Concurrently working on projects that are in, have 6 months, 2 years, and 5 years until production.

Solving problems which are technically challenging and which make a difference for the company.

Starting a successful company. Creating new products and technologies that help our customers. Being part of a new and growing industry.

The challenge of bringing new technology to market, identifying markets and applications, and teaching, demonstrating, and educating in those markets.

The complexity of the task and working in highly effective teams.

The start of a new technology cycle introduces the details of the latest transistor architecture. Learning/applying the latest hand-me-downs from the development crew is interesting.

Transforming new designs into finished hardware.

Turning my skills and expertise into better ways of producing goods that are in high demand by our customers.

Was able to build prototype to realize the conceptual design. The design involves many aspects of physics: optics, thermal, electronics, mechanics, and software.

When the circuit you design does what you want it to.

Industry – Primarily Engineering (page 7 of 7)

Work on a great team of people with an interesting piece of software with large market growth potential.

Work with educated people, push the envelope in high technology, apply physics to the nanotechnology level to useful devices.

Working on a team to solve complex problems. Applying my experience to help shape the metrology needs of my customers.

Working with a diverse team, knowing that positive outcome helps improve diagnostic PET imaging for patient care.

Working with a lot of great engineers in the field of photonics. Solving difficult technical problems, as well as understanding the complex psychology of technical sales.

Working with motivated people to develop products with a wide range of applications. Recognizing the impact of the products we manufacture on other products and services such as cell phones, LCD TVs, computers, medical devices, research, photovoltaic devices, etc.

Working with world-class talent. Having the resources available to conduct cutting-edge research in silicon photonics.

Industry - Primarily Computer Science

Broad spectrum of tech topics - Helping people – Independence.

Dealing with people to resolve problems - work in team.

A good team to work with and interesting problems to solve.

Brings together many fields of study, mathematics, physics, psychology, computer sciences, business, etc.

Challenging work, engaging with multiple teams and companies, design and implement practical solutions.

Compensation.

Constructing and analyzing experiments evaluating strengths and weaknesses under various applications on innovative new hardware and software platforms. Coming up with an explanation of the experimental results.

Customer satisfaction of my products.

Delighting customers.

Designing and developing software.

Designing security architectures and implementing them in products. Designing the security process. Working on a team.

Developing systems that perform complex analysis to provide real-time information that benefits our customers.

Fixing customer's problems quickly.

Flexible schedule, challenging problems, great group collaboration with smart people, rewards, bonuses and other compensation.

Gaining insight and understanding about new problems and challenges, and helping to invent solutions.

Great coworkers, interesting problems, good compensation, sometimes get to travel to Europe for business.

Industry - Primarily Computer Science (page 2 of 3)

Great science.

Having an impact on business performance. Working with diverse teams, globally. Well compensated.

Hearing customers enjoy using our product.

I can use my brain a little bit sometimes.

I get to create brand new technology used by hundreds of thousands of human beings across the world. Some of it is path breaking.

Intellectual freedom and ability to influence a large public agenda (clean tech, smart grid).

Interacting with people who are interested in technology. Developing and using new technologies. Solving interesting problems.

Interaction with development and customers. Solving software delivery problems.

Interfacing with a variety of customers and projects where my products are crucial to cutting-edge science and engineering.

International business which accounts for a 1/2 of what I do. Diversity of clients.

Knowing that my work directly impacts tens of thousands of people.

Leading a diverse team of engineers, solving complex problems.

Making an impact on products used by our customers, working with smart people.

money, stability.

Problem solving, developing software.

Seeing a complex project succeed.

Seeing measurable improvement on metrics of quality of Google search developing careers of people on my team and seeing them get promoted.

Seeing the products on the market utilizing the ideas/technologies I contributed in essential ways.

Industry - Primarily Computer Science (page 3 of 3)

Solving difficult technical challenges on very large-scale systems (tens of thousands of nodes, petabytes of data) at low latencies (< 100ms).

Solving challenging new problems, mentor junior colleagues.

Solving interesting but challenging problems small company, so I have a large impact seeing my code in production, doing huge amount of calculation and producing a result used by millions of consumers.

Working closely with a small team to build and improve a complex application. The intellectual challenge of modeling business processes and concepts in code and bringing structure and simplicity to what starts out vague and overly complex.

Working in a friendly environment with very flexible schedule.

Working with nice folks from chemistry, physics, math, CS and EE, all of whom are trying to work intelligently and efficiently.

Working with people, solving problems, changing environment (each client is different).

Working with smart people and solving complex problems. While my job is not related at all to my background to physics, I find that rigorous training in problem solving and deep understanding of underlying physical processes has helped me enjoy and advance in every position I have held.

Industry - Primarily Physics

Ability to help build a business and contribute to national security.

Ability to work on those things that are of interest to me.

Breaking intellectual ground, doing something practical.

Bringing a vision on paper to life with the help of incredibly talented people.

Building something that will be used to help people. Intellectual challenge.

Challenge, future, experience.

Creating and implementing new IP/technological solutions.

Develop technologies to help people and advance medical care and to push physics methods into the medical sciences.

Developing calibrated measurements for the oil industry from concept to manufacturing, and to application in the field.

Developing real working technologies while leading a talented and motivated team.

Discovering new materials and devices that perform better than anything else in the world.

Discovering new phenomena on the Sun, designing and testing new optical filters, public speaking

Each day brings a variety of different challenges since we are a relatively small company. That keeps the mind active. Providing education content to K-12 students/teachers is very rewarding when you get a chance to talk with those that use the product successfully.

Freedom of new ideas.

Freedom to do research.

Get to do R&D in intriguing areas.

Getting paid to do research.

Have the opportunity to work on the cutting-edge research projects in my field of interests.

Industry – Primarily Physics (page 2 of 3)

Helping to develop and sell new products.

I can learn new things.

I work at a medical device start-up. I enjoy the multi-faceted responsibilities (applied research, intellectual property, external collaboration development, new business development). I enjoy the fast-pace of a start-up and the complexity of developing medical devices (minimally invasive imaging). The geographic area is very stimulating (intellectually and business-wise) to me.

I work with some extremely talented physicists, engineers, chemical engineers, and software engineers. However, the most rewarding aspect is seeing the incredibly diverse applications developed with instrumentation that I designed.

Intellectual reward of innovating new methodologies and solutions. Contributing to overall societal good by improved healthcare. Contributing as part of a team with ambitious goals.

Interacting with a wide range of customer research applications and interests.

Interacting with collaborators and mentoring new scientists, solving difficult and important scientific problems.

It is intellectually stimulating, I work with very intelligent people on interesting technical problems, and I get to apply science in a business setting with the promise of realizing products which are deployed to solve real-world needs.

Learning new topics and applying a strong physics background to help solve difficult problems related to those topics.

Operating and growing a small business. Getting market acceptance for products I have developed.

Pay, growth of a small business, location.

Potential for success.

Projects are generally short (typically on the order of 1 year). This allows me to do many different things.

Salary.

Industry - Primarily Physics (page 3 of 3)

Saving lives.

Studying new materials and their properties and potential applications.

The ability to do state-of-the-art research in the leading research laboratory in the field of magnetic devices. Being recognized as a leader in my field of research. Getting paid very well for a job that I would do as hobby.

The intellectual pursuit of new knowledge, technology and understanding. I still love the "Aha!" moments of physics just like I did the first time I picked up a book on physics.

The most rewarding aspects of my current job is working on the cutting edge of technological advances and the fact that my research produces products that are useful.

The technology itself. The company also has a flat management structure, and so it lacks the useless, non-merit based hierarchy I experienced elsewhere.

Theory and modeling of physical systems for electronic and optoelectronic applications.

To design some novel systems

While I rarely get to perform my own research anymore, it is still gratifying to see the successful development of a new product by my team.

Work on diverse materials problems using multiple experimental methods. Collaborate with team to develop new and interesting materials that can be used in new products.

Working in a field that "does good" in the world. Maintaining connection to science. Opportunity to lead innovative product development.

Working with a group of experienced scientists, access to large and diverse datasets and supporting information.

Industry - Primarily Other STEM Fields

1) being employed with a decent salary. 2) documentation and development. 3) casual Environment.

A tradition-rich and challenging environment where one can see and can contribute to the impact of optics and physics to technology and the society at large.

Building an organization that can compete in the evolving world economy.

Designing and developing software to meet laboratory needs.

Freedom to design and iterate on various theoretical models. Collaborating with other PhD scientists. Mentoring and coaching younger scientists in the group.

I never know what I am doing from one day to the next.

I work with incredibly smart people to solve extremely hard, ill-defined problems quickly and well. My personal area of focus is the intersection of technology and strategy, helping convert critical but ill-defined problems into clear and actionable problem statements that we can execute on and resolve as a team.

Intellectually stimulating colleagues, very interesting product, interesting projects to work on, great work culture.

Interacting with people and data analysis.

New product development. Challenging environment with complex issues.

Push the digital printing technology to new territory where no one has been to before.

See the direct results of my work applied in practice. Collaborate with a diverse team. Work on a changing range of projects over time. Develop novel solutions to complex problems.

Seeing a product marketed. The joy of discovering process improvement(s). Struggle to overcome limitations presented by competitive intellectual property. Opportunity to continue to learn.

Seeing my technology applied in the marketplace to help with real-world problems.

Solving difficult problems that matter.

Industry - Primarily Other STEM Fields (page 2 of 2)

Solving interesting technical problems.

Team interactions and some new software development life cycle practices.

Work on novel genomic sequencing techniques for which there are no existing solutions. I am essentially my own boss. I am involved in almost every aspect of the company.

Working with people from diverse backgrounds.

Working with customers helping them to solve problems that affect the environment, food safety, and drug development.

Industry - Primarily Non-STEM Fields

Ability to influence a large organization and see result of one's work, varied challenging business and organizational problems to resolve, a great management team, a great group to manage, working with great technical people.

Ability to interact with a wider range of employees on the business side (sales, marketing, credit). Realizing results more frequently and on a faster timescale than in research.

Always need to learn new things.

Analyzing complex systems of business needs and people and delivering solutions.

Being able to bring both my problem solving and science skills together with my business skills.

Career advancement by moving to the business side of the company after a long career spent in wafer process development.

Client relationships, working with great colleagues, solving business problems.

Exposure to broad range of technical research and technologies, significant writing opportunities, good compensation.

Getting to learn about new technology, and solving client's problems.

I have developed expertize/experience with the work, hence I can be rather effective. I also like to solve problems and the pace of work.

Intellectual challenge.

Leading individuals. Accomplishing financial and operation goals.

Opportunities to work with inventors, learning a new profession.

Owning something that makes a difference in the world.

Research & constant learning.

Solving difficult problems that matter.

The gratitude I receive from clients for helping them.

Industry - Primarily Non-STEM Fields (page 2 of 2)

The team I work with, and the opportunity to teach other colleagues.

To guide and grow an organization.

Troubleshooting and analyzing trends in reserve calculations.

Troubleshooting providing "elegant" solutions.

Using applied math and other analytics to solve real world business problems. My company's prime area of expertise is revenue management and it is satisfying to see clients have their bottom line revenue increased by the solutions I provide.

Working on cutting edge ideas in advanced technical fields.

Working with a diverse group of technologies, people, and problems. There is always something new to work on.

Working with an entrepreneurial, hard-working team. Managing growth of a business in an opportunity rich environment.

Working with diverse technologies and working with people from a variety of backgrounds.

Working with very good people. Making a real difference in the business. Working in a wholesome business (milk).