Individual Development Plan

for
Matthew Ludlow

Personal Information

Title:
Institution: Judge Memorial Catholic High School
IDP last modified: 5/24/2021

Career Plans Summary

Plan A

Long Term Goal: Aerospace Engineer
Short Term Goal: I need to gain more experience in the field of Aerospace and I need to go to college since I am still in High School

Plan B

Long Term Goal: Computer Science
Short Term Goal: I need to gain more experience in the field of Computer Scienceand I need to go to college since I am still in High School

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SMART Goal Summary

Note: only goals within last 12 months and up 12 months in the future are shown.

June, 2021

- Relevant [daily]
- Relevant
- Orderly organization [daily]
- Lead by example [weekly]

July, 2021

- Relevant [daily]
- Relevant
- Orderly organization [daily]
- Lead by example [weekly]

August, 2021

- Relevant [daily]
- Relevant
- Orderly organization [daily]
- Lead by example [weekly]

Self Assessment Summary

Strong Skills

- Creativity/innovative thinking
- Speaking clearly and effectively
- Seeking advice from advisors and mentors
- Demonstrating workplace etiquette
- Complying with rules and regulations
- Upholding commitments and meeting deadlines
- Maintaining positive relationships with colleagues
- Contributing to discipline (e.g. member of professional society)
- Contributing to institution (e.g. participate on committees)
- Time management
- Leading and motivating others
- Serving as a role model

Weak Skills

- Writing grant proposals

Top Interests

- Designing experiments
- Performing experiments
- Analyzing experimental results
- Planning new scientific projects or developing new research directions
- Giving presentations about science
- Reading papers in your field
- Learning about other fields
- Thinking about science
- Keeping up with current events in science
- Discussing science with others
- Learning how to use new equipment or techniques
- Building new devices or developing/refining techniques

- Working in a team
- Work-related travel
- Leading or supervising others

Activities To Avoid

- Writing position papers or policy papers
- Analyzing financial data or budgets
- Assessing business trends and strategies, entrepreneurial ideas

Top Values

- Teamwork: work in collaboration with others as part of a team
- Congenial Atmosphere: work with friendly colleagues
- Competition: engage in activities that test my abilities/achievements against others' abilities/achievements
- Intellectual Challenge: perform work that is intellectually stimulating
- Job Security: be assured of keeping my job and salary
- Benefits Available: have health, retirement, tuition reimbursements, etc.
- Professional Development: have a job with opportunities for growth or promotions
- Learn New Things: be challenged to learn new skills or knowledge on a regular basis

Self Assessment Summary Tables

Skills Summary

1 **Highly deficient**	2	3	4	5 **Highly proficient**
• Writing grant proposals	• Statistical analysis • Navigating the peer review process • Careful recordkeeping practices • How to negotiate	• Critical evaluation of scientific literature • Interpretation of data • Presenting to nonscientists • Teaching in a classroom setting • Training and mentoring individuals • Managing data and resources • Demonstrating responsible authorship and publication practices • Can identify and manage conflict of interest • How to prepare application materials • How to interview • Deep knowledge of my specific research area • Technical skills related to my specific research area	• Broad based knowledge of science • Experimental design • Basic writing and editing • Writing for nonscientists • Negotiating difficult conversations • Providing instruction and guidance • Providing constructive feedback • Dealing with conflict • Planning and organizing projects • Delegating responsibilities • Creating vision and goals • Understanding of data ownership/sharing issues • Demonstrating responsible conduct in human research • Demonstrating responsible conduct in animal research • Can identify and address research misconduct • How to maintain a professional network • How to identify career options	• Creativity/innovative thinking • Speaking clearly and effectively • Seeking advice from advisors and mentors • Demonstrating workplace etiquette • Complying with rules and regulations • Upholding commitments and meeting deadlines • Maintaining positive relationships with colleagues • Contributing to discipline (e.g. member of professional society) • Contributing to institution (e.g. participate on committees) • Time management • Leading and motivating others • Serving as a role model

Interests Summary

1 **I would like to never do this in my career**	2	3	4	5 **I would like to do this often in my career**
• Writing position papers or policy papers • Analyzing financial data or budgets • Assessing business trends and strategies, entrepreneurial ideas	• Writing project reports or other business-related correspondence • Developing curricula • Writing about science to non-scientists	• Writing grant proposals • Writing scientific manuscripts • Creating presentations • Performing research with animal subjects • Performing research with human subjects • Teaching in a classroom setting • Mentoring or teaching one-on-one • Negotiating agreements • Serving on committees • Networking with others • Organizing things, creating systems in the workplace • Planning or organizing events	• Representing data in figures/illustrations • Attending conferences or scientific meetings • Using quantitative methods in understanding science (e.g., statistics, mathematical modeling) • Using qualitative methods in understanding science (e.g., focus groups, in-depth interviews, field observations) • Speaking about science to non-scientists • Developing collaborations	• Designing experiments • Performing experiments • Analyzing experimental results • Planning new scientific projects or developing new research directions • Giving presentations about science • Reading papers in your field • Learning about other fields • Thinking about science • Keeping up with current events in science • Discussing science with others • Learning how to use new equipment or techniques • Building new devices or developing/refining techniques • Working in a team • Work-related travel • Leading or supervising others

Values Summary

1 **Unimportant**	2	3	4	5 **Essential**
• Help Others: be involved with directly helping individuals or small groups • Job Tranquility: work in a low pressure environment	• Work Alone: work on projects by myself, with little contact with others • Predictability: have job duties that are similar day-to-day • Variety: have job duties that change frequently • Physically Challenging: have a job that requires high physical demands	• People Contact: have day-to-day contact with clients or colleagues • Fast Pace: work in a busy atmosphere with frequent deadlines • Independence: work with little direction from others • Recognition: be recognized or appreciated for the quality of my work • Risk Taking: have work duties that involve trying new things, despite the chance that negative outcomes could result • Not Physically Challenging: have a job that does not require high physical demands • Flexible Schedule: have some choice over the hours or days that I work • Family Friendly: have a job with policies supportive of families, including day care, flexible work schedules, etc. • High Demand: develop a desirable knowledge base or skill set to facilitate finding my next job	• Help Society: contribute to betterment of world • Friendships: Develop close personal relationships with people at work • Make Decisions: have authority to decide courses of action, policies, etc. • Supervision: be directly responsible for work done by others • Influence People: be in a position to change attitudes or opinions of other people • Work on Frontiers of Knowledge: engage in the pursuit of knowledge or generating new ideas • Expert Status: be acknowledged as an expert in a given field • Creativity: originate and develop new ideas • Aesthetics: appreciate the beauty of things and ideas that I work with • Earning Potential: have a salary which allows me to purchase essentials as well as some luxuries of life	• Teamwork: work in collaboration with others as part of a team • Congenial Atmosphere: work with friendly colleagues • Competition: engage in activities that test my abilities/achievements against others' abilities/achievements • Intellectual Challenge: perform work that is intellectually stimulating • Job Security: be assured of keeping my job and salary • Benefits Available: have health, retirement, tuition reimbursements, etc. • Professional Development: have a job with opportunities for growth or promotions • Learn New Things: be challenged to learn new skills or knowledge on a regular basis

			• Location: live in a place which is conducive to my lifestyle • Status and Prestige: work in a position or organization which carries respect with my friends, family or colleagues • Work/Life Balance: balance time spent at work and time spent doing other activities • Exercise Competence: take advantage of my strongest talents and skills on a regular basis	

Career Exploration Summary

Career Resources

5/24/2021	The Venture Cafe: Secrets, Strategies, and Stories from America's High-Tech Entrepreneurs	Entrepreneurship

Events

4/23/2019	FIRST FRC World Championship	FRC top 8% and learned about different forms of engineering.

Networking

5/12/2021	Dr. Jacob George, Director Utah NeuroRobotics Lab	Assist. Prof of Electrical & Computer Engineering & Physical Medicine and Biomedical Engineering. We discussed an internship opportunity for me going into my senior year of high school. This allowed me to gain a grasp of what field I want to go into for College

Career Advancement Goals

Learn more about particular career options

No goals.

Get experience (internship, part-time position, volunteering, job simulation, etc.)

No goals.

Develop career-specific skills

No goals.

Enhance my professional network

Name: Relevant
Frequency: daily
Start date: 6/1/2021
End date: 8/13/2021
Accountability: I will be accountable by staying up to date and working with mentors and developing personal networking for future Careers
Completed: No

Name: Relevant
Frequency:
Start date: 6/1/2021
End date: 8/13/2021
Accountability: I will be accountable by staying up to date and working with mentors and developing personal networking for future Careers
Completed: No

Join or form a peer group to help me follow through on my career advancement goals

No goals.

Skills Development Goals

Careful recordkeeping practices

Name: Orderly organization
Frequency: daily
Start date: 6/1/2021
End date: 8/13/2021
Accountability: I will be accountable by maintaining a record of where all of the supplies are and the amount of supplies available. This will allow me to work more efficiently and provide access for others who are working as well.
Completed: No

Technical skills related to my specific research area

No goals.

Project Completion Goals

Prepare for mentoring or supervisory responsibilities

Name: Lead by example
Frequency: weekly
Start date: 6/1/2021
End date: 8/13/2021

Accountability: To be accountable, I will focus on how I interact with others as a volunteer and different strategies implemented by my mentors and other researches.

Completed: No

Mentoring Summary

Mentor	Role
Mr. Tim Strickland	He primarily mentors me in how to adapt and overcome engineering challenges while being creative and open in my thinking to design the best idea I can and be able to improve on it with more data.