George Mason University

Bridge Program

Prov-500 class

Exploring the Field: A Discipline-specific Analysis of Writing

Final submission

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“Conventions of Writing Summary”

Computer engineering is a specialty related to computer performance usually found with electrical engineering or computer science and rarely as a separate department. If computer engineering is found with electrical it would be related more to hardware enhancements and system security while, if it is found with computer science it should be related with integration of software and hardware. In general, Computer engineering is concerned with computer hardware including computer organization and architecture to enhance computer performance from different perspectives such as integration of computer software and hardware and the security of computer systems whether through software or hardware solutions.

Writing in computer engineering is suggested to be in a simple and cohesive structure to offer an effortless understanding. Having one idea per a sentence or a paragraph and one topic per a section is adequate. Writing in computer engineering is a vehicle to deliver your thoughts and views about specific topics. It can be technical or academic. A technical writing might be involved in variant scopes such as lab report or a project proposal. An academic writing is used to document and record one’s observations, experiments, researches, or interpretations. It can be on the form of a scholarly article which will be described in next section. Writers should provide readers with evidences and theories to illustrate credibility in a product. Computer engineering is not limited to deal with computers but it can be involved in any computerized system such as creating and enhancing smart systems in cars or creating and monitoring

network systems. Therefore, many kinds of writing styles can be involved in a computer engineering discipline such as descriptive, persuasive and comparison and contrast.

- **Structure**:
    - For more clarity and organization writing usually is supported with visual aids such as charts, tables, and equations. The huge amount of information that is involved in one specific idea compels a writer to use charts to demonstrate the same information in brief and organized ways.
    - The structure of writing in computer engineering is simple and easy to follow; most papers are similar to scholarly papers containing:
        - **Abstract** is used to provide overview about an article by briefly listing the key points which will be included.
        - **Introduction** section includes background information and guidelines for a paper organization and logic.
        - **Literature Review** is a part of a scholarly article in which we list some studies which are related to a topic that we want to write in.
        - **Methodology** is employed to describe the method of collecting data and examining it.
        - **Results** are to state results that are generated from a study then compare it with previous studies.
        - **Conclusion** section is used to write your observations and recommendations for future work.

- **Bibliography** is to cite all resources that a writer used to achieve his or her paper.

- **Language:**
  - Using first person is undesirable in academic writing in computer engineering. However, first person can be used in a section that writers describe experiment or steps that he has taken to conduct his study.
  - Computer engineering is a complicated discipline that contains many deep ideas and invisible concepts that cannot be demonstrated to be visible by human being. In other words, there are many concepts in computer engineering depend on assumptions which can be recognized in real life. For example, data stream or data flow in networking can be described but cannot be illustrated because it is something cannot be seen by human beings.
  - Short words, simple sentences useful information and specific ideas are preferable aspects in computer engineering writing. Experts claim that the use of these aspects attract readers and increase comprehension. In some cases, the use of long or complicated sentences is possible only and only if it is necessary.
  - Excess in length or style or use buzzwords should be avoided in respect of clarity and simplicity.
  - Readers should be formerly notified with new terms or acronym to increase the fluency of writing and prevent going back and forth to find one ambiguous term. it is a writer responsibility to clarify each term that might be difficult to be understood. According to IEEE guidelines there should be sections called

keywords to explain the most important words in a paper. For example, RAM (Random Access Memory), ROM (Read only Memory), GSM (Global System of Mobile communication), etc…

- One aspect that I have observed is the existence of key words section in most papers that I have read. These key words indicate the main axis of the paper. Actually, this aspect is important as a reference for readers to locate these words before start reading in order to familiarize readers with paper's topic.
- Based on my observation, view markers are most likely to be used specially in two sections, literature review and discussion. Writers use them to express whether they agree or disagree with specific issue. For example, “in this framework there are many **limitations**....” So, as can be seen from previous example the word limitation indicates that writer is unfavored with this framework.
- Contrast markers are also used to show contrast between two comparable things. In computer engineering papers we use this type of markers to distinguish between two mechanisms used to solve same issue. For example, “**However**, our security requirements engineering framework **overcomes** all the limitations of Haley....” Therefore, the bold words show the contrast between two framework.
- Illustration and demonstration tools in computer engineering are similar to those in applied science fields. We use real life example to simplify a specific concept. For example, we relate cyber security crimes with these crimes that happen in daily life. Also, the use of visual aids such as, tables and charts, to illustrate

comparison between to objects or to list relevant data in one table. This will increase the organization of a paper and help both readers and writers to present a relevant information together. For example, the comparison of four different algorithms can be presented in three pages but with visual aids we can include them in one small table.

- Assessment markers can be clearly seen in computer engineering writing. The function of assessment verbs is to deliver a precise meaning by choosing an appropriate verb which can reflect a correct meaning. For example,"We **test** the effect of Haley and his colleagues framework...." The verb test in previous example gives a clear idea to readers about the action that happened on Haley framework which is testing.

- **References:**
  - Institute of Electrical and Electronic Engineering (IEEE) is the official citation style which is the numbering of references is employed by citing one reference per number. Every reference in a Transactions reference list should be a separate number entry. Use of one reference number to designate a group of references is not allowed.
  - Writers should relate their work with existing work to show how they build their work on previous work and how it differs from other's work.
  - Based on my research I found that there are three main purposes for references:
    - They help demonstrate that work is new; from readers' prospective, they will recognize the originality of new work in comparison with references.

        - They demonstrate an author's knowledge in research area; which is significant particularly when an author's reports are regarded as a reference.
        - They point to background reading which is necessary to some readers who want to explore some references.
    - Oppositional referencing is used some cases in computer engineering field to persuade readers by highlighting a contrast between your results and other individuals' results in order to prove your results' efficiency. For example, "Haley and his colleagues suggest artifacts that are probably too complex for regular developers [27, 31]. In this framework there are many limitations like they don't categorize or prioritize…."

- **Common genres:**

  In computer engineering we use different kinds of genres depending on the goal of writing. The goal can be determined by variant factors such as knowing the readers you are writing for and knowing a purpose behind writing a paper.

    - Technical project reports: they are a vehicle to state a project's steps and explain the purposes and results of your project.
    - Proposals: this genre used to propose a project ideas or a research topics to acquire committee approval or to ask for funds.
    - Memos: The main purpose of a memo is to communicate with individuals in your community. For example, during your study you need to communicate with your instructor for asking about assignments or any other needs.

- Papers that follow the IEEE style: The two main reasons specifically in computer engineering are to use this type of writing is a sheet for journal articles and conference papers.
- Research papers: it is clear from the name that this type is used to write your research paper for the purpose of publication or share your work with other.
- Executive summary: is the summary of a technical report, usually written for reader who cannot read the complete version of technical report.
- Cover letters: Is for job seekers to highlight their skills and proficiencies.
- Engineering Lab reports assignments: As mentioned early in genre analysis section, students who have a lab section in their courses need to write lab reports for each lab meeting separately.

"Interview and Comparative Report"

- I have interviewed Dr.Andre Manitius the chair of electrical and computer engineering department at George Mason University. Dr.Manitius received the Ph.D. degree from the Polytechnical University of Warsaw, Warsaw, Poland in 1968. He joined George Mason University in September 1988 as Professor of Electrical and Computer Engineering. Dr. Manitius' research interests include mathematical aspects of control theory, including control of distributed parameter and delay systems, optimal control, optimization, numerical and computational methods in dynamical systems and control systems. He has published over 70 papers in his fields of interest, and held various editorial positions with several professional journals. The next section is the summary of what Dr.Manitius said about writing in electrical and computer engineering.

- **Some obstacles** that you might face at the beginning of your journey in writing include the lack of knowledge in terminology, the precise meaning of engineering terms, and the description of a physical loss. To overcome these obstacles you might emulate other scholars in your discipline by reading their publications and observing the style that has been written in textbooks will help to generate a good writing**.**
- **To learn about the specific terms** in our discipline you might read journals and textbooks that have been published before to build basic and supported vocabulary and terminology to assist you while writing papers in your discipline.
- **The citation style** that is most likely being used in our discipline is IEEE style which is similar to MLA citation style with minor differences. IEEE style uses quotation marks and reference numbers to reference quotations, and then you can mention more details in a page footer or at the end of paper.
- **The style of writing in computer engineering** tends to be a descriptive writing which describes facts and results that you find during your research. Also, we cannot represent ourselves as a narrator because readers want to read facts and supported experiments achieved in a same scope. A good introduction tells the reader what part of knowledge will be involved in this paper. In other words, writing a good introduction indicates to whether a paper is well organized or not. Explaining some terms that might be new or difficult to understand will help a reader to understand your paper. Discussion, conclusion, and suggestions for future work all should be written in last part of your paper. An understandable paper means you cannot include terms that you did not describe before writers should be clear in your writing and precise. If a paper is not well

written, that might confuse readers and make them back and forth to understand your paper. Comparing what Dr.Manitius said with what I have read on WAC website there are many mutual points.

- **Similarities between Dr.Manitius and WAC**:
  - Technical writing is an initial step to be familiar with writing in our discipline. It can be clearly seen the value of technical writing and its contribution in developing writing skills for students in this discipline.
  - Dr.Manitius and WAC are similar in most points. The reason behind that is the leading role of American universities in computer engineering discipline; they have the major contribution in this field by creating the foundation of this field and inventing most important components of this discipline. So, the scholars agreed in standards that are used in all matters across discipline. For example, IEEE was created by American scholars who have an excellent reputation among community members so they proposed writing guidelines in which we can find the steps we need to generate a paper related to discipline.
- **Reputable resource in computer engineering:**

As any community member is aware of a significant role of IEEE organization in technical fields, Dr.Manituis emphasize main role of IEEE in publications. Other organizations offer a variety of sources which can be accessed through their websites or their published journals and magazine. Association for Computing Machinery ACM is an excellent example of a reputable source in computer engineering which offers a variety of materials whether in online libraries or in printed materials. The last example that was

mentioned by Dr.Manitius is Institute of Engineering and Technology IET which is similar to the mentioned organizations in the way of offering its materials.

- **Example of writing assignments:**

writing assignments in computer engineering is similar to those assignments in applied science and engineering fields. It can be clearly noticed that writing in our discipline depends on delivering the required goal in brief manuscript. In other words, solving problem paper and technical reports assignments ,the most common genres in computer engineering, are concerned with simplicity and briefness. There is one type of assignment exclusive to computer fields assignments which is programming assignments. This kind of assignments used specific programming languages which is understandable by human beings. The experts classified it in the middle between humans' languages and machine language(0,1 bits). Usually programming assignments do a specific goal which can be determined by professors in graduate students cases. The last type of assignments that I want to emphasize is simulation. In fact, the use of simulation is common in engineering overall. The reason behind using this type of tools is to facilitate demonstrate a system that you want to build or results you want to observe. The simulation gives many benefits such as reducing cost, saving time, and reducing effort. As can be noticed, the technical aspect in computer engineering field generate these kinds of assignments which play main role in helping community members to accomplish their tasks.

“IEEE Network magazine”

- History of journal:
    - Institute of Electrical and Electronic Engineers (IEEE) was established in the spring of 1884 by elite of engineers who had quite interest in Electrical field and were considered as pioneers in their era.
    - IEEE association has been established with direct concentration on electricity but after while other interesting fields has appeared which is related to electricity such as, communications and computer science.
    - Early in 1900’s, the mission of organization was to preserve, research and promote the history of information and electrical technologies. In addition, they Support inventors and pioneers in that period to go further in researching in technological fields and enrich the world with creative findings.
    - IEEE become one of the most significant source for technological fields, meanwhile, has more than 390,000 members in 160 different countries around the world.
    - IEEE has a variety of publications, conferences and standards. More than 1700 standards are effective today were released by IEEE.
    - IEEE Network journal was started in 1988 by communication community which is a part of different communities under IEEE categorizing by field interests.
    - The journal has collaborated the evolution of networking which is can be concluded in two big events Internet and mobile systems.

- According to Journal Citation Report JCR study the IEEE publications continue to maintain the top ranking in their fields. This study considers three key factors to release its results; these three factors are: First, i**mpact factor** is the average number of times articles from a journal published in the past two years have been cited in the JCR year. Second, **Eigenfactor Score** takes into account the number of times articles from a journal published in the last five years have been cited in the JCR year while also considering which journals have contributed these citations. Third, **article influence** s**core** formula determines the average influence of a journal's articles over the first five years after publication.
    - Based on article influence score, IEEE network magazine was ranked the eighth effective journal in telecommunication field. It also was ranked the ninth cited journal in telecommunication field, based on impact factor.
    - In 1988, the journal started as an introductory journal that is concerned with network and communications.
- As Internet appeared and the network developed, the editors of this journal preoccupied with network technologies topics which have an apparent effect in network evolution.
- Many technologies that are an important part in networking were introduced in IEEE network journal. For example, IEEE standards in networking such as WiFi and WiMax were introduced in this journal.

    - The contribution of this journal in advanced technology is clear for fields' experts and professionals because some role models that we know in our discipline have published in this journal.
- The purpose of this journal:
    - To make the exchange of reliable knowledge much easier. IEEE has strict guidelines for publishing so they guarantee a high level of reliability in their publications. Readers can cite, imply, and practice in their activities whether researching activities or practical activities.
    - Create an organized reference for all important information and findings in networking to facilitate using them in community members activities that related to networking discipline.
    - The distinguished spread of IEEE publications promote the globalization of this discipline to serve a variety of goals such as the standardization of networking field, the enhancement of community connection channels, and involving most community members in discipline evolution.
- **Purpose of journal:**
    - The journal covers a variety of topics which include: network protocols and architecture; protocol design and validation; communications software; network control, signaling and management; network implementation (LAN, MAN, WAN); and micro-to-host communications.
    - IEEE *Network* provides a focus for highlighting and discussing major computer communications issues and developments.

- Inform readers on topics of interest to the networking community.
- IEEE network journal the most popular publication among IEEE's publications; one statistic shows that one of the most sited publication in telecommunication, the number twelve most cited journal in electrical and electronic engineering, and the number three most-cited journal in computer science hardware and architecture.
- The journal is regarded as one of the biggest references in networking serving more than 400,000 members around the world by providing them up to date information and publishing for individuals who interested in this matter.

- **Influence of journal:**
  - Overall journal has two different influences on readers:
  - Comparison and contrast writing style is used to show distinguishes and similarities between two concepts or techniques within same scoop, usually used to persuade readers to accept or reject new findings. For example, writers how observe or obtain new findings in field they would justify their outcomes to show the efficiency of their findings.
  - Informative writing style is used to inform readers in clear manners about certain subject, usually used for explanatory propose. For example, writers state a description about a specific concept without including any personal view.
- **Types of genres:**
  - Research paper: writers publish new research which they have conducted to document that they publish in official publication, share new findings which is

generated by researching, and contribute to their field by boosting scientific research.

- Overview articles: to give brief description about subject in few words no more than two pages.

- **Types of writers:**
  - Faculty members from different countries around the world faculty members publish their researches and articles in this journal.
  - IEEE members who hold high qualifications who can contribute to IEEE's publications.
  - Graduate students who work on their graduate programs can publish their academic work through this journal.
  - Professionals who work non-academic fields but they still hold high qualifications and excellent experience in their fields.
- **Language:**
  - The use of floweriness, verboseness, and poetry in this journal is undesirable to avoid an ambiguity and an obfuscation in a text.
  - Providing clear and precise meaning for each concept and predefining each term. There is a rule in IEEE guideline states that the listed terms should be defined clearly to readers to avoid any potential misunderstanding.
  - Descriptive language used to clarify data listed in tables or graphs for example, "first column represents…"

    - The number of verbs in abstract in one article is thirteen which is average. The verbs indicate the scoop of this paper which is contrasting new technique with others. For example, the verb, develop, was used twice to illustrate what has been achieved by the writer in his experiment. Also, the verb, obtain, was used to compare the results that the writer obtained with old results to show the advantage of his results.
    - This journal follows the discourse of computer engineering community which is perceived by most members.
- **Structure of journal:**
    - First part of journal contains table of content.
    - Other part of journal divided into subsections each one has one scholarly article (7-10).
    - In some issues, there are small boxes include the description of a certain concept that related to the topic of the journal.
    - Overall the structure is simple which can be browsed by readers smoothly.
- **Patterns :**
    - Most scholarly articles in this journal if not all use headings and subheadings. This helps readers to follow ideas and content easily. In addition, it provide a clear organization and a logical connection to an included content.
    - All articles should have section to explain keywords, which will be used by writers, to define and inform readers the importance of understanding these words before reading this article.

- Since the journal is academic, most articles follow the structure of scholarly articles by including abstract, introduction, literature review, methodology, results, conclusion, and bibliography.
- Writers who write in comparison and contrast style most likely to cite other individuals' work to point out variances in order to show weaknesses or effectiveness.

- **Guidelines of IEEE network journal:**
    - They have detailed guidelines which can be found at their website:
- http://dl.comsoc.org/ni/

"Genre Analysis & Language Analysis"

Date:03/15/2012

Graduate Student at bridge program

George Mason University

Dear new teaching assistants,

I am writing you this letter to introduce one of the most important genres that you are going to face in laboratories teaching which is a laboratory's manual. This type of genre you will use in courses that have practical classes which will be held in laboratories.

The lab manual is a guide in which we can find detailed and clear instructions to be able to use certain a laboratory's equipment. Usually, it has a part for describing all equipments features and functions. An another part of this genre contains different experiments which can be conducted by using laboratory's resources. The mission of

writing this type of genre is not quite easy. It needs experience and knowledge in equipment and its applications. So, it is usually written by manufacturers that made this equipment. Overall, the mission of writing manual is concerned with technicians who understand each specific part of their prototype. As teaching assistants or professors, we benefit from this genre in preparing practical course for students. As I mentioned before, there are many experiments that we can include in class syllabus accordingly with course objective. The same laboratory can be used for both advanced or beginners classes so laboratories' supervisor can decide which experiments would be appropriate for a certain level.

Overall, the lab manuals are one of many types of technical writings in computer engineering. Meanwhile, they share many similarities to an academic writing in both language and structure. For example, scholarly articles that include experiments as an evidence to verify results. They have the same language to explain how listed experiments have been conducted.

Organizations and purpose:

In laboratory manuals, writers provide directions and instructions to conduct experiments by using laboratory equipment. Writers provide instructions step by step to facilitate the mission of students to follow instructions. After accomplishing different steps a writer will ask readers to check results to know whether or not they are on the same page, for example, “after doing step 4 a dialog window will appear….” Therefore, writers check whether or not readers follow instructions properly. Repeating a same step twice in different words indicate the importance of this step. For example, “assign device button….

Remember, you only have to assign device once…." Almost, each section has graphs to demonstrate the intention of writers and convert the written steps into visual steps. For example, "create the circuit in Fig 2.2…."

The organization in this genre is simple and clear by using headings and subheadings which are describing steps which are mandatory to be done by students. In fact, there is a common structure which is followed by most writers in applied science majors. The structure offers introduction and background information at the beginning of each experiment. The next section is a lab procedure which is the most important part. Then, we can find an experiment procedure and results which should be matched to what are mentioned by writers. In experiment procedure section, writers provide diagrams for the experiment's circuit and tables to test your circuit and match your results. This organization helps readers to find what they need easily. For example, a procedure section is the most important section for conducting any experiment because it includes all steps for an experiment. Therefore, with headings existence readers can move smoothly to this section.

- **Content:**

Writers in this kind of genre always support their instructions by giving results which must match what readers found after collaborated steps properly. If readers found that their results do not match results in a manual that means there was a step skipped or misinterpreted. For example, "after programming is complete, observe the behavior of the inverter circuit." Usually, writers assume that readers are untrained and do not have a background about topics. So, they provide specific instructions and define everything that might be confused or new to readers. A lab manual follows a specific sequence which is

should be followed carefully by readers. In most cases, the second experiment depends on your knowledge about the first experiment. Therefore, if background is needed it will be in the same manual no need to explore other sources.

In conclusion, I have introduced this genre because it is most likely to be faced by teaching assistants who spend a considerable amount of their times in laboratories. Hopefully, this is helpful to provide you with overview about laboratories manuals.

- **Language:**
    - Based on my observations, using sequence words can be clearly noticed. For example, “before you can program ...” and “then, pin….” The reason behind using sequence words is that experiments follows a specific order, so we have to elaborate the steps as mentioned. The order of instructions in experiments are important and restricted. In other words, students can not skip one single step because it has effect in last results or overall function for an experiment.
    - Also, writers use instructions’ words such as perform, create, connect and program to guide users to accomplish a correct step. And to meet the purpose of this genre which is instructing. Writers use diagrams to demonstrate the intended design of a circuit that we need to create to conduct an experiment. Therefore, readers can compare what they built with what writers suggest as a final prototype.
    - Since a lab manual usually relates to specific field the use of jargons (words are known among group of people for example, terms are known by computer engineering community members) can be easily noticed. For example, Mux (multiplexer), Programmable Logic Unit, and Programmable Integrated Circuit.

- The use of reporting verbs and markers verbs are not apparent in a lab manual because the purpose of writing here is to instruct readers to use a lab's equipment. So there is no need to report what others said or to show agreements or disagreements.
- Sentences that are used in this genre are simple and direct. For example, the use of most frequent words in English are most likely to be used here such use, create, implement, etc....The use of a complex sentence will contradict with the purpose of lab manuals which is to educate users to use a lab's resources.
- Descriptive style is used to describe charts, tables, or a specific step in an experiment. For example, " in figure 4.2, the first column...."
- Heading, subheadings, and bullet points are used to make the mission of transition through a text much easier. For example, the most important part to achieve any experiment is a procedure section which include steps that you need to conduct an experiment. So, with the existence of heading you can jump to the section that you need easily. Also, the bullet points are much easier to follow and know where you are during experiment accomplishment.
- Cause and effect words are most likely to be used in this text to link and connect ideas in a logical way. The most frequent words that I have noticed are "as a result", "therefore". In most cases, after accomplishing specific steps writers want to check if you got the same result or not. So, they use the previous words to indicate the result after conducted steps. For example, "Therefore, you will notice the value of …."

- Based on my observation, the order of sentences in this genre follow a specific pattern. Writers present or state condition then follow it by verbs. I think this style of writing increases the objectivity of your writing by doing one condition to reach a specific objective. For example, “After connecting x with y, you will **notice....**”

“Reflection”

Generally, newcomers in any discipline need to be more knowledgeable in terms of discipline literacy. To achieve that there are different steps should be taken. A very first step I should be able to understand the discourse of a community and have abilities that allow me recognizing when information is needed and have a capacity to locate, evaluate, and use effectively the needed information. Basically, the understanding of discourse community could be obtained by following steps. First, I need to be aware of jargon (special terminology in specific discipline) in order to be communicative whether in spoken materials or written materials. Second, understanding the types of evidences that are most likely to be used in computer engineering. Analysis, proofs, modelings, simulations and experiments are most common types of evidences in computer engineering. Third, recognizing role models in your discipline gives a big picture for each successful individual in this field and clarifies what steps they have taken to reach this honorable position. In addition, I can establish a direct channel with them for communication, consultation, or cooperation. Fourth, I hope I can promote networking with community members to be updated with new activities and events that are related to your interest. Fifth, I also need to be aware of some important matters related to

writing such as following publisher guidelines, knowing research methodology, copying or cooperating with professionals, and employing an appropriate genre.

In addition to what were mentioned, there are other useful recommendations that can be followed to increase your literacy in the discipline. One of the well-known strategies is reading reliable sources which have been written by professionals. This could teach newcomers most aspects of a specific discipline. Reading reliable resources that have been written by writers who have an excellent reputation to learn the formats, discourse, conventions and genres of your community. It is mandatory to have an ability to employ the spoken and written language patterns for the purpose that you need such as, analyzing the broad area of topics in your discipline and integrating both speaking and writing language in order to communicate effectively with individuals in your community.

Language in computer engineering is suggested to be clear, concise, complete, correct in language use, and appropriate in terms of using figures, tables, and texts. Experts claimed that meeting these requirements results in increasing the percentage of delivering intended meanings and ideas clearly. The use of evidences and proofs are preferred in all cases to ground one's claims. In academic society, individuals always look at the reliable findings that were proved by on of the mentioned strategies of proving one's hypothesis. There different kinds of strategies could contribute a great deal in clarifying writer stance such as examples, view markers, contrast markers, and assessment markers. Other factor that affect one's writing directly is word-choice; I believe there are a plenty of words for a similar meaning but I will always ensure to

choose a smart choice which is an effective and a accurate in the situation that I use in. it also helps to demonstrate how an action was performed by choosing an appropriate verbs. Finally, the use of adjectives and adverbs add a dimension to academic writing to make it looks more specific. Adjectives and adverbs modify the nouns and verbs respectively they work with to make them more specific.

I have many concerns related to writing across computer engineering such as , the need to have a good understanding of conventions of writing across discipline and build strong vocabulary related to my discipline is the biggest challenge at the beginning. Also, I need to expand my knowledge in topics that related to my research interests to be able to introduce myself to faculty member who has the same research interest. I feel I do not have confidence to work with professionals in my discipline without any constraints such as, being afraid to show you have insufficient knowledge about specific concept. Being creative and original is a difficult task though which cannot be achieved in a short run. I hope to be a distinguished member who can publish in reputable journals in computer engineering community. A last dream which I hope to become true is to be one of the most cited researchers in network security. After accomplishing this project, I would like to say that I got many benefits that can help me to overcome some of these concerns and ease others.

Appendix A (interview questions):

1. Tell me about your beginning in academic field?
2. I would like to focus on writing in our discipline, so what are the steps that you have taken to generate a good writing?
3. What kind of challenges and obstacles you have faced in your academic writing in discipline?
4. How were you able to overcome these kinds of obstacles? Which strategies helped you the most?
5. As you know each discipline has specific vocabulary what is the efficient source in your view that may help the beginner to implement a sufficient amount of vocabulary to have a good start?
6. What is the most style that we are using in our discipline whether to write assignment or academic article?
7. What are the criteria that are used to recognize a good paper?

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