I studied B.Sc. in Computer Science & Engineering from Bangladesh Army University of Science & Technology as a graduate. I have benefited from the breadth of Bangladesh Army University of Science & Technology syllabus content that has given me a comprehensive exposure to the core areas of Computer Science. After passing the Higher Secondary Certificate exam with GPA of 5.00 out of 5.00, I decided to study computer science and engineering because of my passion for the field of computer science. I completed my graduation with dignity and discipline and engaged myself more in the field. During my undergraduate studies, I had a very good understanding of all major areas of Computer Science as well as identify and pursue subjects of special interest to me. The fields of Artificial Intelligence, Machine Learning, Data Mining, Algorithms, and Data Structure have appealed to me tremendously. I learned about the underlying principles of Artificial Intelligence in the course "Artificial Intelligence". The course covered various aspects of Artificial Intelligence like Uninformed Search strategies, constraint satisfaction problems, Propositional logic, Bayesian Rule, Learning Neural and Belief Networks ANN, Back Propagation, to name a few. Thus developed an interest in Artificial Intelligence. After completing my graduation, Currently, I am working as a software engineer at Hovata Technologies from March 2020 with technical efficiency in CPP, javascript, PHP, python, ORACLE, and other languages. In the beginning, I had to work under the supervision of my seniors. After performing and fulfilling their expectations, I was given the liberty to operate independently. Given that I have already acquainted myself with the industry, this is the right time for me to go for further specialization. Eventually, I have decided to pursue the Master's course in Computer Science. My higher education took my attention because of its wideness and diversity. My academic experience and research interest guided me to the MSc program at IIT, KHARAGPUR, I feel this step in my life will perfectly fit my academic and research goals. That's why I keen to study at IIT, KHARAGPUR.

Subject of study
The application of Artificial Intelligence in financial services.

Working Title
Artificial intelligence has given the world of banking and the financial industry as a whole a way to meet the demands of customers who want smarter, more convenient, safer ways to access, spend, save and invest their money. AI is helping the financial industry to streamline and optimize processes ranging from credit decisions to quantitative trading and financial risk management.. Not long ago, Artificial Intelligence (AI) only existed in the realm of science fiction. Today, it's a reality and is only growing more prominent each day, spreading across both every imaginable industry and countries around the world. In current situation, it's very problematic to pick the right decision for banks and credit lenders. Having good credit aids in receiving favorable financing options, landing jobs and renting an apartment, to name a few examples. With so many of life's important necessities hinging on credit history, the approval process for loans and cards is more important than ever. Artificial intelligence solutions can help banks and credit lenders make smarter underwriting decisions by utilizing a variety of factors that more accurately assess traditionally underserved borrowers in the credit decision making process.

Analysis of the Problem
Though , there are plethora of research related to AI-based financial services, there's a need to a lot of enrichment in the progressive field of finance in credit risk and decision management. It's focusable to all that word is being shifted to digital era and automations are being implemented in all the sectors .Financial services are the main mechanism to keep a consistent economy. People who are willing to a startup need supports from banks. And banks need to verify a variety of factors for the approval process. In the era of digitalization, every services are being automated to grow more connectivity with peoples. Smart Banking System already includes the concept of artificial intelligence over credit decision .In Bangladesh, there are many people searching for the right schema to get the loans and the banks also need further verification for the approval. But the system is not user friendly and people has to face a lot hassle. It's also harder and time consuming for the banks to verify all the documents and factors of the credit lenders to select the right lender. Currently, Artificial intelligence revolutionize the world because of big data and exceptional growth of computing capacity. After the remarkable progress in machine learning, deep learning and neural networks, many banking managements are looking for artificial intelligence to make credit decision and risk management process more smarter and more efficient. Increasingly, the field of financial services like credit

decision is like data mining, data retrieval, face recognition and many other resources to make sense of data ,learn more about the schemas and streamline operations.

Research Method
To achieve the purpose and aim of the study, I need to:
1- Collecting the required data (banks needs to AIbased financial services).
2- Making interviews with credit professionals to specify their needs precisely.
3- Analyzing the collected data to determining the suitable AI-based model that match the needs.
4- Creating the proposed AI-based model. In this step, data mining is used to refine and select a final model. The model is validated based on the required goals.
5- Distribute a survey to the credit professionals to find the effect of proposed artificial intelligence – based model on the company outcome.

General Structure of the Study
Chapter 1: Abstract
Chapter 2: Introduction
　　　　a. Section 1: Introduction about Artificial intelligence (the impact of artificial intelligence on financial services, the wide-ranging topic of AI and its different applications)
　　　　b. Section 2: : Credit Lenders Perceptions
　　　　c. Section 3: AI In Financial Services(Voice or Face Recognition at the fingertips, Chatbots, Personalized UI)
　　　　d. Section 4: Where Credit Lenders Should focus (The Individual's Perspective , The Bank's Perspective)
　　　　e. Section 5: Long-Term Implications
Chapter 3: Literature Review
Chapter 4: The Problem of the Study
Chapter 5: The Proposed Model
Chapter 6: Methodology
Chapter 7: Implementation
Chapter 8: Results and Analysis
Chapter 9: Conclusion
Chapter 10: References
Chapter 11: Appendices

Academic Contribution of the Study
After completing my graduation in computer science & engineering , I am currently working as software developer at Hovata Technology. I have worked with various management information system for automatizing into digital platform . I strongly believe that my company can make a revolution in the digital banking system by implementing a smarter solutions for credit decisions based on artificial intelligence and machine learning . Financial Services should be more user friendly to ensure the right services are being delivered to the right person at the right time.

Literature Review
Although generally known that weak credit risk management systems may lead to higher non-performing loans and ultimately negatively impact on the bank performance, a lot of studies have been carried on the topic. However, there are still notable gaps that need to be bridged or addressed and therefore the need to commission even more studies on the topic. It is important to cross-examine the impact of the emerging new ICT supported tools in improving the credit risk management systems. – Joshep Macharia Kihuro, PhD, Student, Finance Department, University of Nairobi. (IOSR Journal of Economics and Finance, Nov.-Dec. 2018, Page 12)