SUMMER INTERNSHIP REPORT

MONOLITH TECHNOLOGIES PRIVATE LIMITED

NAME : SWETA D

REG.NO :210621104056

YEAR :III

DEPARTMENT :BE-CSE

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JEPPIAAR INSTITUTE OF TECHNOLOGY
— Self Belief | Self Discipline | Self Respect —

(A CHRISTIAN MINORITY INSTITUTION)
JEPPIAAR REMIBAI EDUCATIONAL TRUST
Approved by AICTE Affiliated to Anna University

Dr. L.M. Merlin Livingston, B.E., M.E., Ph.D.
Principal

Date: 21|06|2023

BONAFIDE CERTIFICATE

This is to certify that ~~Mr.~~/Ms...............D. SWETA...............................
(Reg. No...........2106211104056.........................) is a bonafide student
of **Department of COMPUTER SCIENCE AND ENGINEERING, Jeppiaar Institute of
Technology** (Affiliated to Anna University), Sriperumbudur. ~~He~~/She has to undergo a Summer
Internship to satisfy the academic requirements.

~~He~~/She may be permitted to undertake the internship in your esteemed organization. The data
provided for the internship will be kept confidential.

It is also requested to provide an internship completion certificate from the respective
organization.

I am looking forward your cooperation in the future.

21|06|2023
PRINCIPAL

PRINCIPAL
JEPPIAAR INSTITUTE OF TECHNOLOGY
KUNNAM, SUNGUVARCHATRAM,
SRIPERUMBUDUR-631604.

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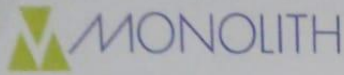
MONOLITH TECHNOLOGIES PRIVATE LIMITED
Door No.12,Old No.19, 4th Floor, Neela Tower,
10th Avenue, Ashok Nagar, Chennai - 600083

17 July, 2023

Sweta.D
BE Computer Science and Engineering
Jeppiaar institute of Technology
Chennai.

Dear Sweta,

Sub: Letter of Internship Acceptance

We are pleased to offer you the internship program with Monolith Technologies Private Limited, Chennai for a period of 3 months starting from July 06, 2023.

During this period, your duties and assignments for this postion will be those described to you in your orientation with Mr.Ganesh Rajagaopal Vice President – AVGC projects and Training.

Should you have any questions regarding the specifics of your internship, please contact me.

Sincerely,

for **Monolith Technologies**

Ganesh Rajagaopal
Vice President – AVGC projects and Training.

ACKNOWLEDGEMENT

I would like to express my sincere gratitude and appreciation to all those who have contributed to the successful completion of my 6 week internship and the preparation of this report.

First and foremost, I am deeply grateful to Mr Ganesh Rajagopal, my internship supervisor, for providing me with valuable guidance, mentorship, and continuous support throughout the internship. Your insights and expertise have been instrumental in shaping my understanding of the industry and enhancing my skills.

I extend my heartfelt thanks to the entire Monolith Technologies team for welcoming me into their midst and offering me a platform to gain practical experience. The collaborative work environment and the opportunities to work on challenging projects have been truly enriching.

I would also like to acknowledge the support of my academic advisors, Dr.Tamilarasi, Mrs.Janaki Ramal for their encouragement and for giving me the opportunity to participate in this internship program. Your guidance has been invaluable in aligning my academic learning with real-world application.

I am grateful to my colleagues and fellow interns who have provided a conducive and friendly atmosphere, making my time at Monolith Technologies both enjoyable and productive.

Finally, I wish to express my heartfelt appreciation to my family and friends for their unwavering encouragement, understanding, and motivation throughout this journey.

Thank you all for your contributions, guidance, and unwavering support. This internship experience has been an exceptional learning opportunity that I will carry forward in my academic and professional pursuits.

OVERVIEW OF THE COMPANY

- Monolith Training and Technologies is at the forefront of AR innovation.

- The company focuses on developing cutting-edge AR applications for various sectors, including gaming, education, marketing, and healthcare.

- Monolith's team comprises experienced developers, designers, and researchers who are dedicated to pushing the boundaries of AR technology.

OBJECTIVES

The primary objectives of my internship at Monolith were as follows:

- Gain practical knowledge and hands-on experience in developing AR applications.

- Understand the underlying technologies and frameworks used in AR development.

- Collaborate with the development team to contribute to ongoing AR projects.

- Learn about the challenges and opportunities in the AR industry.

ABOUT THE PROJECT
AR GAME DEVELOPMENT

- One of the key projects I was involved in during my internship was the development of an AR game. The objective was to create an interactive and immersive gaming experience using AR technology.

My responsibilities included:

- Researching different AR frameworks and selecting the most suitable one for the project.

- Collaborating with the design team to create game assets and user interfaces.

- Implementing AR features such as object tracking, gesture recognition, and spatial mapping.

- Testing and debugging the game to ensure a smooth user experience.

- Incorporating user feedback and making iterative improvements to the game.

AR TRAINING APPLICATION

- Another significant project I worked on was the development of an AR-based training application for a client in the manufacturing industry. The goal was to create an immersive training environment using AR to simulate real-world scenarios.

My responsibilities included:

- Conducting extensive research on the client's requirements and understanding the specific training needs.

- Designing and developing interactive 3D models and simulations for the training application.

- Integrating real-time data visualization and interactive elements into the AR environment.

- Optimizing the application for different devices and platforms.

- This project allowed me to enhance my skills in 3D modeling, user experience design, and working with client requirements.

SKILLS ACQUIRED AND LEARNING EXPERIENCE

- During my internship at Monolith, I acquired several valuable skills related to AR development.

- Understanding of tracking, plane detection, and object recognition techniques.

- Ability to design and develop interactive 3D models and simulations.

- Knowledge of optimizing AR applications for different devices and platforms.

- I had the opportunity to work on real-world AR projects and apply the theoretical knowledge gained during my academic studies.

- The hands-on experience helped me better understand the challenges and intricacies of AR development, such as device compatibility, performance optimization, and user experience design.

TOOL OR SOFTWARE USED
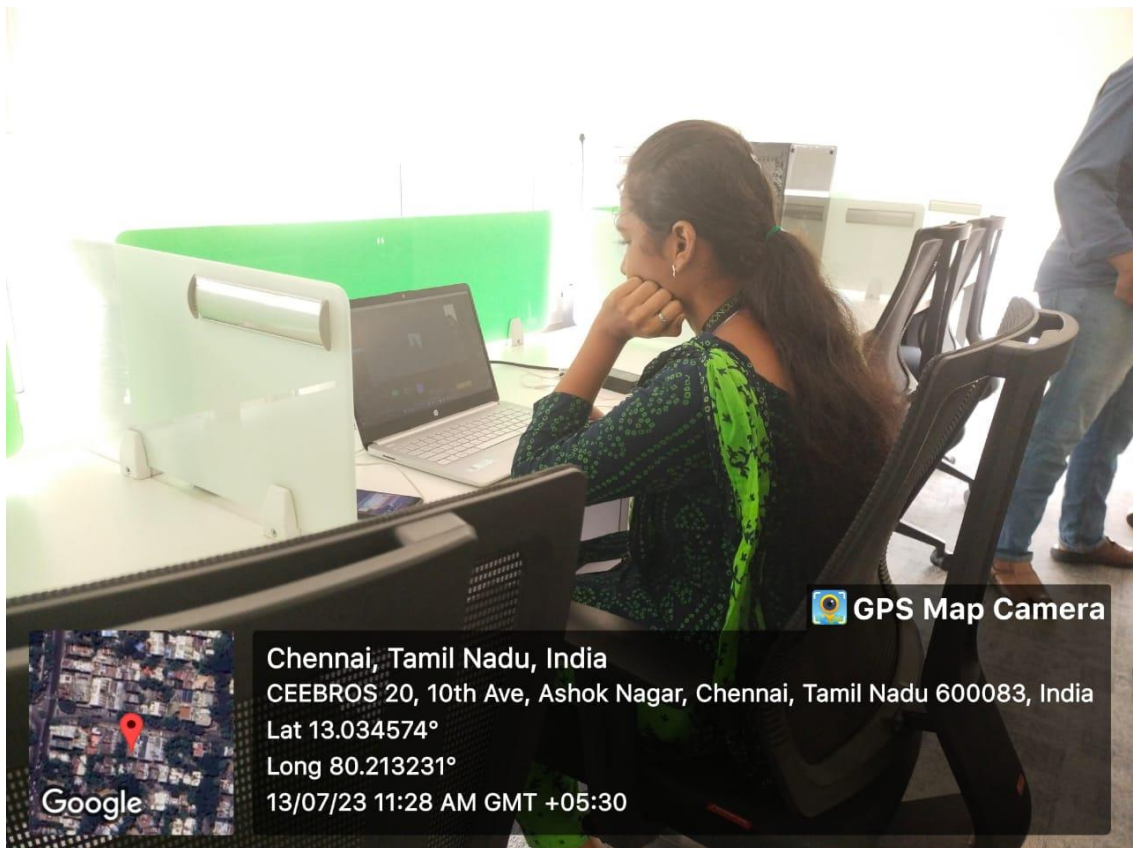
"Meta Spark Studio v167"

- Meta Platforms, Inc. operates as a social technology company. The Company builds applications and technologies that help people connect, find communities, and grow businesses. Meta Platform is also involved in advertisements, augmented, and virtual reality.

- Meta Spark Studio is a program for Windows that lets you create attractive effects and filters in augmented reality that you can later share on your social networks.

- Meta Spark Studio is an AR creation tool for building, testing and publishing augmented reality experiences for a number of different platforms.

- Spark AR lets your business create and share augmented reality experiences that reach the billions of people using Facebook, Messenger and Instagram. Build intuitive, customizable augmented reality experiences with our flagship creation software and expert guidance every step of the way.

➢ Read the documentation of the tool for creating the projects.

➢ Later, worked on "picker patch" and explored the templates.

➢ Created a filter: "Apple Game".

➢ Worked on 3D Animation Model and interaction, Real scale world objects.

➢ Created filters like Card Flip Animation and Quiz Game Filters.

➢ Learnt on how to customize the instructions.

➢ Created "Burger eating filter".

➢ Detailed on "Portal Effect".

➢ Built a portal.

- Built some objects, where "object tap" patch plays a major role.
- Construction of portal and the objects inside.
- Working on some modifications to build a game.
- Published a filter on the Instagram :"Happy Independence Day", on August 15.

CHALLENGES FACED

- Technical Complexity
- Hardware Limitations
- Cross-Disciplinary Collaboration
- Real-World Integration
- User Experience Design
- Testing and Debugging
- Rapidly Evolving Technology
- Intellectual Property and Privacy Concerns
- Project Management
- Feedback Incorporation

GPS IMAGE

Chennai, Tamil Nadu, India
CEEBROS 20, 10th Ave, Ashok Nagar, Chennai, Tamil Nadu 600083, India
Lat 13.034574°
Long 80.213231°
13/07/23 11:28 AM GMT +05:30

CONCLUSION

- I gained practical knowledge, developed key skills, and gained insights into the AR industry's current trends and challenges.

- I am grateful for the opportunity to work on exciting AR projects and contribute to the advancement of this rapidly evolving field.

- The internship has solidified my passion for AR development and equipped me with the necessary skills to pursue a career in this domain.