SUBHA BAL PAL

B.Tech. - Computer Science & Engineering

Ph: +91-8981718313
Email: sr6265@srmist.edu.in
Potheri, Tamil Nadu, India - 603203
LinkedIn: https://www.linkedin.com/in/subha-bal-pal-3b4643226/

BRIEF SUMMARY

As a technically adept professional with a deep passion for artificial intelligence (AI), machine learning, and cybersecurity, I possess a robust foundation in programming languages, data analysis, and machine learning algorithms. I am eager to leverage these skills for innovative AI projects. Additionally, I have a strong interest in the Internet of Things (IoT) and its applications.

I am enthusiastic about iOS development and have extensive experience creating various apps in Swift, utilizing frameworks like SwiftData, SwiftUI, and CoreML. Currently, I am collaborating with the iOS Development Centre, powered by Apple, to publish an app on the App Store.

KEY EXPERTISE

Python Development   Machine Learning   iOS Development

EDUCATION

SRM Institute of Science & Technology, Kattankulathur   2021 - 2025
B.Tech. - Computer Science & Engineering | CGPA: **9.33 / 10**

Holy Home, Sreerampore   2019
12th | CISCE | Percentage: **80 / 100**

Gospel Home School, Rishra   2017
10th | CISCE | Percentage: **88 / 100**

INTERNSHIPS

Infosys | IT / Computers - Software   14 Apr, 2024 - 10 May, 2024
iOS Software Developer

Key Skills: Jira   Swift   Scrum   Agile   Firebase   iOS   Teamwork   Public Speaking

I oversee a dedicated team focused on the development of a Hotel Management System project.

By coordinating closely with stakeholders, prioritizing tasks, and proactively addressing risks, I ensure project success. Regular client communication and feedback integration foster strong relationships and project alignment. I mentor team members in Agile practices and utilize tools like JIRA for transparent project management. Our collaborative efforts have resulted in timely project delivery, exceeding client expectations. I also contribute to continuous process improvement, optimizing team performance and outcomes.

Samsung Research Bangalore (SRI-B) | Technology   15 May, 2023 - 24 Feb, 2024
Research Intern

Key Skills: Machine Learning   Cyber Security   SQL Injection   NLTK

Spearheaded the development of a groundbreaking solution aimed at testing API vulnerabilities by leveraging machine learning algorithms and frameworks during an internship at Samsung.
Acted as the point of contact and facilitated the production of a machine learning model based on Transformer and TextCNN architectures, focusing on identifying SQL and XSS vulnerabilities within queries.
Received a Letter of Recommendation from my mentor and professor, acknowledging significant contributions to the project and demonstrating leadership and technical proficiency.
Collaborated closely with interdisciplinary teams to integrate machine learning solutions into existing frameworks, enhancing security measures and mitigating risks associated with API vulnerabilities.
Tech Stack: Python, Pytorch, Flask, SQLMap

PROJECTS

YourCare
20 Apr, 2024 - 15 May, 2024

Team Size: 8

Key Skills: Firebase   Swift   Figma

Project Link: https://github.com/mohit2pal/Team-7-HMS

Developed the app's frontend and backend using Firebase, and set up an SMTP server for customized email functionality. The app digitizes hospital processes, enabling patients to quickly book appointments and assisting administrators in effectively managing hospital resources.

Swift-Box
01 Sep, 2023 - 30 Apr, 2024

Team Size: 3

Key Skills: Swift   iOS   AI   Google API

Project Link: https://drive.google.com/file/d/1jR5s7r_o2gCc5a1SQFZCdEfOIhpyODXX/view?usp=sharing

Conceptualized and developed Swift-Box, an innovative iOS app designed to enhance email productivity through
advanced AI algorithms.
Implemented cutting-edge natural language processing (NLP) and machine learning techniques to parse and analyze email content effectively, extracting key information and providing concise summaries.
Leveraged contextual analysis to intelligently categorize emails based on their content, streamlining the inbox management process and
facilitating prioritization of important messages.

Secure KYC
10 Mar, 2024 - 12 Mar, 2024

Team Size: 6

Key Skills: AWS   Face Recognition   Google Cloud Platform   Google API   S3   Flask   Computer Vision   Pillow

Project Link: https://github.com/mohit2pal/Secure-KYC

Spearheaded the development of SecureKYC, an innovative online video KYC platform aimed at revolutionizing traditional KYC processes.
Implemented Flask, Google Vision, AWS S3, AWS Rekognition, and Pillow to facilitate live photograph capture, Aadhaar verification, and
signature capture.
Orchestrated the integration of facial recognition algorithms for enhanced security and accuracy in user authentication.
Delivered a highly inclusive and intuitive KYC solution, bridging language and generational gaps while ensuring regulatory compliance.
Tech Stack: Flask, Google Vision, AWS S3 and Rekognition and Pillow.

ACHIEVEMENTS

- 2nd Runner Up in IOT Expo
- Currently working with iOS Development Centre in collaboration with Apple to launch our app in App Store

ASSESSMENTS / CERTIFICATIONS

Oracle Certified Foundations Associate (Industry Certification)
24 Jun, 2026

Key Skills: Oracle   Oracle Database

Oracle Certified Foundations Associate certified, demonstrating foundational knowledge in Oracle technologies and database management.

Python for Data Science
31 Jul, 2025

Aggregate: 77 / 100

Key Skills: Data Science   Python   Analytics   Pandas   Matplotlib   Scikit-Learn

Achieved distinction as a course topper, demonstrating advanced proficiency in Python programming, data manipulation, statistical analysis, data visualization, and machine learning with NumPy, Pandas, Matplotlib, and Scikit-learn.

Compiler Design
31 Jul, 2025

Aggregate: 67 / 100

Key Skills: Compilers   Regular Expressions   Theory of Computation

This course provided an in-depth understanding of the principles and techniques used in the design and implementation of compilers. It covered topics such as lexical analysis, syntax analysis, semantic analysis, optimization, and code generation.

Design and Analysis of Algorithms
31 Jul, 2025

Aggregate: 67 / 100

Key Skills: Algorithms   Trees   Graphs   Dynamic Programming

Gained a strong foundation in algorithm design (divide and conquer, greedy, dynamic programming), data structures (heaps, union-find, search trees), and algorithm analysis (asymptotic complexity, O-notation), honing problem-solving skills and equipping me to analyze and compare algorithm efficiency.

Introduction to Internet of Things
31 Jul, 2025

Aggregate: 75 / 100

Key Skills: Internet of Things   Arduino   Raspberry Pi   Networking   Sensors   Actuators   Cloud Computing

This course provided in-depth knowledge of IoT architecture, communication protocols, sensor networks, Arduino and Raspberry Pi programming, data analytics, cloud and fog computing, and applications in agriculture, healthcare, and smart cities, gaining expertise in designing and implementing IoT systems.

Programming, Data Structures and Algorithms Using Python
31 Jul, 2025

Aggregate: 78 / 100

Key Skills: Python   Data Structures   Algorithms

Comprehensive Python course covering basics (conditionals, loops, functions, data structures) and advanced topics (algorithms, dynamic programming, exception handling, file manipulation), with practical skills in Python, algorithm design, and implementing data structures (dictionaries, linked lists, binary search trees).

Introduction to Machine Learning
30 Jun, 2025

Aggregate: 99 / 100

Key Skills: Machine Learning   Transformers

Explored machine learning models including logistic regression, multilayer perceptrons, CNNs, and NLP, applying them to practical challenges like medical diagnoses, image analysis, and text forecasting. Hands-on experience deploying algorithms with PyTorch.

Arduino Certification in Electronics and Physical Computing (Industry Certification)
24 Jun, 2025

Aggregate: 94 / 100

Key Skills: Arduino   Arduino UNO   Embedded C   Electronics

Completed Arduino Certification, demonstrating expertise in electronics, programming, and physical computing with Arduino, validated through official examination.

SEMINARS / TRAININGS / WORKSHOPS

iOS Development Training Institute Name: SRM Institute of Science & Technology, Kattankulathur   16 Aug, 2023 - 14 Apr, 2024

Key Skills: Design Thinking   iOS   Mobile Application Development   Databases   Presentation Skills

EXTRA CURRICULAR ACTIVITIES

- Practicing Data Structures
- NSS

WEB LINKS / IMs

- WhatsApp - 8274040263
- Github - https://github.com/mohit2pal

PERSONAL DETAILS

Gender: Male
Current Address: Adhiyamaan 123 , SRMIST Hostels, SRM Nagar, Katthankulanthur Chennai, Potheri, Tamil Nadu, India - 603203

Date of Birth: 03 Jul, 2001
Known Languages: English, Hindi, Bengali
Permanent Address: Flat No. 303, Block-B Shyamkunj Apartment,63 T.C Mukherjee Street Rishra,Hooghly, West Bengal,Rishra,Hooghly,West Bengal,India, Rishra, West Bengal, India - 712248
Phone Numbers: +91-8981718313, +91-8274040263

Emails: sr6265@srmist.edu.in , mohit2pal@gmail.com