

## Professional Objective

*To secure a challenging position that hones my personal and technical skills as Software Professional, which lead to innovate and implement new technologies essential to IT field.*

## Technical Expertise

<i>Programming Language</i>	: C, C++, Embedded C, Python, Rust, Java
<i>Database System</i>	: Oracle, MySQL, PostgreSQL
<i>Web Designing Language</i>	: HTML, CSS, JavaScript, ReactJS, Redux, RTK
<i>Frameworks</i>	: Fast API, Django, Rest API
<i>Tools &amp; Utilities</i>	: GIT, VS Code, Shell script, Jira and Bitbucket
<i>Operating System</i>	: Windows and Linux

## Areas of Interest

- ✓ Data Structures and Algorithms
- ✓ Cryptography & OOPS concepts

## Personal Skills

Comprehensive problem-solving abilities, excellent Program developing and debugging skills, ability to dynamically adapt to new environment, willingness to learn, innovative, proactive hard worker, taking quick decisions, effectively working towards team's goals.

## Employment

### Microchip Technology: (Feb 2022 – Present):

As a software developer at Microchip Technology, I have been working on CryptoAuthLib and TPDS Application within the Secure Product Groups.

*Responsibilities includes:*

- Development of Trust Platform Design Suite (TPDS) using Python and React applications to demonstrate Crypto product features and usage.
- Development of library support for Microchip Crypto Products.
- Development of Secure Provisioning Services for Microchip Crypto Products through TPDS.

### *Projects executed/executing:*

- Developed WPC (Wireless Power Consortium) Qi 1.3 application usecase and firmware project for Microchip secure elements using c, python, react and cryptographic library.
- Created Symmetric and Asymmetric Authentication use cases for Secure Devices.
- Design and developed various utility tools for the TPDS Application to support factory programming for microchip boards, an X509 certificate parser, and a Microchip manifest file decoder.
- Developed the Configurators to Generate the Provisioning Package for Secure Provisioning Services.
- Added support for Proto Provisioning the Microchip secure devices in the TPDS Application.
- Upgraded the React-based frontend application for TPDS using Prime React components.
- Enhanced the user experience by integrating Redux and Formik for state management and streamlining user forms.
- Added Package manager to the TPDS Application for managing the installation of packages.

## Academic Projects

GitHub Profile: [igokulganeesh](#)

### Smart Transfer

The objective of this project is transferring large files faster across the network by means multiple threads so that performance would be increase. Usually Read/Write process are costly as compared to CPU cycles and Read/Write operations are independent of each other hence these operations will be running in different threads in parallel to utilize the CPU. Also, files are compressed so that size of transferring data is minimum, it took faster transfer. And Files are encrypted for security purpose.

*Tools:* Java, Socket, Multithreading

### Connect Four Game

Connect four is a two-player game, in which the players take turns dropping colored discs into a 7-column, 6-row vertically suspended grid. The pieces fall straight down, occupying the lowest available space within the column. The objective of the game is to be the first to form a horizontal, vertical, or diagonal line of four of one's own discs.

Game modes:

1. Play with friends.
2. Play with Computer (Using **Minimax Algorithm with Alpha-beta pruning**)

*Tools:* JavaScript, Bootstrap

### EasyExam

It provides an automatic evaluation of answer based on the keyword provided to the application in form of the input by the teacher which will provide equal distribution of marks and will reduce errors also. The NLP checks for grammatical errors and linguistic analysis will be performed. The score of each process will be used to determine the final score of the student.

*Tools:* Python, Django, scikit-learn

## Academic Record

COURSE	Name of the Institution	Board of Study	Year of Passing	Marks/CGPA %
B.E (CSE)	Thiagarajar college of Engineering	Anna University	2022	8.8
XII	V.H.N. Hr. Sec. School, Madurai	State board	2018	91.08
X	V.H.N. Hr. Sec. School, Madurai	State board	2016	87.8

## Achievements

- Won **4 Gold Badges** in **HackerRank** Coding Platform – **C++, JAVA, Problem Solving** and completed **4 certifications**. HackerRank profile - [igokulganesh](#)
- Solved **200+ problems** in **LeetCode** using **C++**. LeetCode id - [igokulganesh](#)
- Won **1<sup>st</sup> place** in **Sweep the Bugs** contest conducted by TCE in TechUtsav on March 11, 2k19.
- Won **1<sup>st</sup> place** in **TopCoder** contest conducted by CSI Association Student Branch in TCE held during the year 2019.
- Won **1<sup>st</sup> prize** in **OOP Contest** conducted by IEEE Association of Computer Science Department.
- Won **1<sup>st</sup> place** in Creatrix18 **hackathon** for the project '**Evaluating Descriptive Answers paper**' conducted by TCE in 2018.
- Received Certificate of appreciation for having **STOOD OUT FROM THE CROWD** during the training program conducted by Focus Academy for career Enhancement.

## Co-Curricular Activities

- Displayed Online Working Environment Project in **F'stival 2020** held in TCE.
- Participated in the **Finals of Certatim Hackathon** conducted by TCE in 2019.
- Participated in the **Finals of Code Xtreme contest** conducted by PSG, Coimbatore in 2019.
- Participated in the **Finals of Coffee with Java contest** conducted by MIT, Chennai in 2019.
- Participated in the **Finals of C-Star Programming contest** in 2019.
- Received Spoken Tutorial Certificates organized by **IIT Bombay** for **C, Java, RDBMS, and Python**.
- Successfully completed '**Algorithmic Toolbox**', '**Data Structures**', '**Java Programming: Solving Problems with Software**' an online non-credit course authorized by University of California San Diego and offered by Coursera.

## Personal Profile

Name: Gokul Ganesh I

Degree: BE (Computer Science Engineering)

DOB: 14-September-2000

Languages Known: Tamil and English

Address: 994, Villapuram Housing Board,  
Madurai – 6250011.

Email: igokulganesh@gmail.com

Phone: 9789301535

## Declaration:

*I, **Gokul Ganesh**, hereby declare that the above-mentioned information is correct up to my knowledge and I bear the responsibility for the correctness of the above-mentioned particulars.*

Place: Chennai

**(Gokul Ganesh I)**