

SHANTHANU BALEKAI

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About me

Passionate programmer, design engineer and ethical hacking enthusiast. I am hardworking with a never give up attitude with the ability to learn new things in a short period of time. Ambition, determination, and commitment are qualities that define me. Anything that I lack in knowledge I make up for with a hunger to learn new things, persistence, and a plan.

Education

B.E | 2020-2024 | B.M.S COLLEGE OF ENGINEERING

- BE in Electronics and Communication Engineering.
- CGPA of 8.7 out of 10.
- Coursework in Assembly Language.
- Coursework in Embedded C.
- Coursework in C Programming.
- Coursework in Verilog HDL.

Skills & Abilities

PROGRAMMING IN C++

- Strong foundational knowledge of C++ and Object-Oriented programming concepts.
- Strong knowledge of STL algorithms and containers.

DATA STRUCTURES AND ALGORITHMS

- Excellent foundation in Data Structures and Algorithms.

LINUX ADMINISTRATION FUNDAMENTALS

- Experience using CLI.
- Knowledge of Networking.
- Good command in Shell Scripting.

ETHICAL HACKING

- WEP, WPA/WPA2 cracking.
- MITM Attacks.
- Client-Side attacks.
- Server-Side attacks.

LOGIC DESIGN USING VERILOG HDL

- Thorough knowledge of the various modelling techniques.
- Deep understanding of logic synthesis and constraint analysis.
- Experience with Xilinx Vivado and Intel Quartus Prime.

WEB DEVELOPMENT

- HTML, CSS, Javascript.
- Frontend Frameworks- Bootstrap, jQuery, React.js.
- MERN stack.
- Other DBMS software- PostgreSQL.

Achievements

SAMSUNG PRISM | 2022-2023

- Selected for the Samsung PRISM program after clearing the coding round with 100% marks.
- Working to develop a Web Application for Samsung R&D Institute Bangalore.

E-YANTRA | 2022-2023

- Stage 1 cleared; Stage 2 scheduled to begin in December.

CODECHEF FEBRUARY LONG 2022 GLOBAL RANK 96

- Link to profile- https://www.codechef.com/users/funkysb_stubbz

5 STAR BADGE IN C++ ON HACKERRANK

- Link to profile- https://www.hackerrank.com/shanthanu_b7

3 STARS RATING ON CODECHEF

- Link to profile- https://www.codechef.com/users/funkysb_stubbz

Project Work

FPGA- BASED TRAFFIC LIGHT CONTROL SYSTEM

- Created a FPGA based traffic light control system that takes in input from Ultrasonic sensors and changes the signals Using Verilog HDL.
- Incorporated various delay and timing controls.

UART MODELLING USING VERILOG HDL

- Successfully modelled a UART (Universal Asynchronous Receiver-Transmitter) to send and receive data packets at a Baud rate of 115200 bps.

PULSE WIDTH MODULATION DEVICE

- Used Verilog HDL to effectively change Pulse width.

3 CHANNEL ADC CONTROL UNIT FOR ADC128S022

- Created a control unit that communicates to the ADC128S022 using the SPI Protocol using Verilog HDL.

IMPLEMENTED DIJKSTRAS SHORTEST PATH ALGORITHM IN VERILOG HDL

- Implemented path finding algorithm which is to be used in the creation of a path finding robot.

DESIGNED AN ELEVATOR CONTROL UNIT USING 8051 MICROCONTROLLER USING EMBEDDED C

- Control Unit was designed keeping in mind the various functionalities of an elevator.

Research Interest

NETWORK ON CHIP (ONGOING)

- NoC using Mesh topology using a DyaD routing algorithm (for 4x4 SoC network).

Online Courses and Certifications

BEGINNING C++ PROGRAMMING - FROM BEGINNER TO BEYOND

- Certificate link- <https://udemy-certificate.s3.amazonaws.com/pdf/UC-d1e00aa4-89c8-45e6-a0b2-b6042f73baae.pdf>

LEARN ETHICAL HACKING FROM SCRATCH

- Certificate link- <https://udemy-certificate.s3.amazonaws.com/pdf/UC-369beff3-31ec-447e-8551-1e8349aa1b72.pdf>

Extra-Curricular Activities

SCRIPT WRITER FOR COLLEGE DRAMA CLUB PRAVRUTTHI.

- Contributed to more than 5 projects.
- Wrote skits and street plays for both online and offline medium.

Additional Contact Information

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