

EVAN CHIME

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<https://github.com/evanchime> | GitHub URL

- You have to set me a coding challenge. It's important!
- Willing to learn. Unassuming. Attentive-to-detail. Problem-solver. A positive attitude. Industrious. Excellent communication and organizational skills.
- Have excellent testing/debugging skills – able to analyse code and engineer well-researched, cost-effective and responsive solutions.
- Seeking a software engineering position that builds tools and services that make a positive impact in the daily environment.
- Have read The C PROGRAMMING LANGUAGE book K & R(including the C Standard Library part), from beginning to end(and solved maybe 90% of the problems, and have seen the solutions of the ones I couldn't solve, after attempting them) and is up-to-date with the latest ISO C standard, read Embedded Software in C for an ARM Cortex M by Jonathan W. Valvano and Ramesh Yerraballi(used in an embedded systems course), from beginning to end, read C++ Primer by Stanley B. Lippman , Josée Lajoie and Barbara E. Moo (solved maybe 90% of the problems and have seen the solutions of some of the ones I couldn't solve, after attempting them) from beginning to end, read a C++ tutorial(www.learncpp.com) twice, from beginning to end and have read THE C++ STANDARD LIBRARY book by Nicolai M. Josuttis, from beginning to end and also is up-to-date with the latest ISO C++ standard

Technical Tools

Git, TDD, Unix, TCP/IP, C, C++, Assembly language(TM4C123 Cortex-M micro-controller), C++/CLI, C#, JavaScript, Python, MFC, Win32 API, WPF, XAML, Oscilloscope, Logic Analyzer, Datasheet reading, Visual Studio .Net, Bootstrap, Jekyll, JQuery, MongoDB, Express.js, Angular, Node.js, Ionic framework, .Net, HTML/5, CSS

Work Experience

Sunrise Senior Living London, England

Health Care Assistant • March, 2011 — August, 2014

Worked in the health care industry as a carer/medication technician, and from about 2012, started learning and practicing programming at least two hours daily

Onye Rail Ltd London, England

Trackman/Groundworker/Controller of Site safety • August, 2014 — January, 2016

Worked in the railway industry as a Trackman/Groundworker/Controller of Site safety, and practicing and learning programming at least two hours daily

January 2016 - December 2018

Learning and practicing programming exclusively, for at least nine hours daily. Built lots of real life applications

FreeLancer

Private Maths Tutor • January 2019 - Present

Teaching A level maths to students in London. Practising my C, C++, Unix programming skills daily. Reading Advanced Programming in the Unix Environment by W. Richard Stevens, Computer Systems A Programmer's Perspective by Randal E. Bryant and David R. O'Hallaron.

Accomplishments

I have built a lot of applications, which is available at my GitHub url above. Some of them is summarized below

- Programmed a TM4C123 Cortex-M micro-controller in C. These are some of the things I was able to accomplish with the micro-controller
 - Implemented a real-time synchronization by designing a finite state machine controller. Using the microcontroller, the finite state machine simulated a traffic control system in a 4-corner intersection, including sensors for cars travelling south and west, and sensor for pedestrians

- Implemented an Internet of Thing; extend the power of the microcontroller by adding a Booster Pack; connected to an access point that provided communication with the Internet; used a client-server protocol to collect weather information; deployed a client-server system that logged local information on a shared server
- Designed a distance meter. A linear slide potentiometer converted distance into resistance ($0 \leq R \leq 10 \text{ k}\Omega$). Software used a 12-bit Analog to Digital Converter(ADC) built into the microcontroller. The ADC was sampled at 40 Hz using SysTick interrupts. Wrote a C function that converted the ADC sample into distance, with units of 0.001 cm. The data stream was passed from an Interrupt Service Routine(ISR) into the main program using a mailbox, and the main program outputted the data on a display connected to a Universal asynchronous receiver-transmitter(UART).
- Designed and built a prototype simple pacemaker. The system will read from a switch, make decisions, and outputs to an LED. Wrote subroutines that wait for the switch to be pressed, wait for the switch to be released, and create an output pulse of fixed duration
- Built a switch interface that implements positive logic, and an LED interface that implements positive logic. Attached this switch and LED to a protoboard, and interface them a TM4C123 microcontroller
- Using the MFC library, implemented dialog boxes, windows resources(icons, menus, cursors, bitmaps, string tables etc), windows controls (progress bars, buttons, boxes, scroll bars, tree control etc), network communications using windows sockets, .lib/.dll libraries, serialization, property sheets, multithreading, manipulation of file systems, database access etc.
- Using Win32 API, implemented dialog boxes, windows resources, windows controls, application that calculates the amount of overtime worked by an employee of a company in a payroll simulation, application that simulates sales of items in a department store or any other store(applies the tax rate and present the total price to the customer) etc
- Using the WPF UI framework, implemented a wide range of GUI elements; labels, textboxes, treeviews, listviews, datagrid views, menus, dialogs, dispatcher timers, panels, speech synthesizers/recognizers etc

- Built fullstack Javascript applications using MongoDB, Express, Angular, Nodejs. Some of them are featured here : <https://evanchime.github.io>

Education

UNIVERSITY OF TEXAS – Austin, USA

Embedded Systems (Online course, Duration: 16 weeks), 2016. Programmed TM4C123 Cortex-M microcontroller in C

TSINGHUA UNIVERSITY – China

Combinatorial mathematics (Online course, Duration: 12 weeks), 2015

FEDERAL UNIVERSITY OF TECHNOLOGY – Owerri, Nigeria

Bachelor of Technology in Industrial mathematics (B.Tech.), 2005