

Michael Forester Hillendahl

michael.hillendahl@gmail.com • linkedin.com/in/mhillendahl • LA/OC, CA 90245

Firmware Engineer seeking to hone skills in collaborative environment

Scholar

Univ of Southern Cal
BS Electrical Engr
Viterbi School of Engr
Class of 2010

Embedded Developer

I2C • SPI • Serial • Parallel
UART • JTAG • GPIO • Drivers
Data Structures • Algorithms
ARM • Atmel • Kiel • Altium

Versatile Coder

C • C++ • Java • JS • OOP
Python • Perl • Ruby
HTML • CSS • XML • JSON
VS • C::Blocks • Dev-C++

Human

Musician • Performer
Hiker • Climber
Enthusiast • Tinkerer
Brother • Son

Experience

Electronics Engineer at Marshall Electronics Inc (2010-present)

- Bare-metal embedded C for video and ARM processors

Achievements

Design

- Developed, maintained flagship product lines
- Designed feature-set, UI for next generation of devices

Development

- Automated time-intensive tasks, reduced overhead by over 95%
- Accelerated dev team's ability to launch new products

Efficiency

- Increased responsiveness by over 100% by rewriting key algorithms
- Maximized reliability and accuracy of core software components

Research

- Ensured market relevance via competitor and industry research
- Prioritized time/cost efficiency testing software and hardware options

Responsibilities

Prototyping

- Implement chip-level communication (I2C, SPI, parallel)
- Develop and demonstrate example features and UI designs

Implementation

- Write drivers for peripheral components
- Develop custom tools to automate repetitive tasks

Refinement

- Finalize feature/UI design
- Balance value with projected implementation time

Production

- Interface with Testing team, optimize artifact resolution
- Document unit preparation procedures for production team

Support

- Implement new features and hardware for new products
- Implement customer-specific design requests

Projects & Skills

Mobile Dev • Android Phone

- Established multiple dev/testing workflows
- Created various apps for Android device

Web Dev • Chrome Browser

- Designed & implemented Google Chrome extension
- Achieved proficiency with relevant JSON, HTML, and JS

Game Dev • Windows OS

- Languages: C, C++, Java, Ruby, Python, Perl, Batch
- Libraries: SFML, OpenGL, OpenAL

Hands-on

Soldering, Assembly
Woodwork, Metalwork

Equipment

Oscilloscope, Multimeter,
Function Generator

Strengths

Leadership & Teamwork
Motivated & Fast Learner