

# Michael Forester Hillendahl

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**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