Andrew M. Scarr

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Education

Personal Enrichment Courses *(Mar 2013 to Present, in order taken)*

Cryptography | Internet History, Technology, and Security | Linear Algebra through Computer Science Applications | Introduction to Systematic Program Design - Part 1 | Introduction to Power Electronics

Stanford University; University of Michigan; Brown University; The University of British Columbia; University of Colorado Boulder - via coursera.org

Graduate Work in Physics / Coursework for Physics and Mathematics Teaching License *(Aug 2006 to Jun 2008)*

University of Cincinnati - Cincinnati, OH

Bachelor of Science in Electrical Engineering (Minors in Mathematics and Physics) *(Sep 2001 to Jun 2006)*

University of Cincinnati - Cincinnati, OH

Work Experience

Senior Software / Research & Electronics Engineer *(Aug 2011 to Sep 2015)*

Constellation Data Systems - Cincinnati, OH

Architecting and developing full stack for remote data access applications, from firmware in C on embedded ARM systems, to the backend Python code and database running on single-board Linux systems, to the frontend JavaScript/HTML5/CSS3 code served to the client. Administrating said single-board Linux systems. Managing engineering tests and hardware builds. Developing Python code for engineering data analysis.

Mathematics Teacher then Substitute Teacher *(Aug 2008 to Aug 2011)*

The Seven Hills Schools then various school districts - Cincinnati, OH

Teaching Precalculus and Algebra II. Tutoring all levels of mathematics during free bells and lunches.

Substituting for teachers of all subjects from 6th to 12th grade.

Special Knowledge

Each category is roughly ordered by amount of experience

OS/Platforms: Mac OS X, Linux (esp. Debian-based), iOS, BeagleBone, Raspberry Pi, U-Boot, Windows, Android

Python: Python 2/3, PEP8, IPython[Notebook]/Jupyter, pyenv, virtualenv, nose, doctest, Flask, Jinja2, Django, SQLAlchemy, Sphinx, Celery, distutils, matplotlib, WxWidgets

C: C, C++, ARM, clang, GCC, make, CMake, Check, C#

CLI: Zsh, Bash, coreutils, shell scripting, startup scripts, ssh, vim, tmux, Docker, Vagrant

Web: ECMAScript 6/2015, JavaScript, CoffeeScript, JQuery, YAML, JSON, Bootstrap, HAML, Grunt, Node.js, Sass, CSS, webpack, React, Handlebars, Ember, Angular 2, PhantomJS

Markup: Markdown, Pandoc, reStructedText, LaTeX

Other Prog.: Mercurial, Git, SQLite, Device Tree, Racket, AppleScript, Objective-C, Mathematica

Misc.: Layered bitmap and vector graphics editing