

# Kaanon MacFarlane

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( 909) 224-6123; kaanonm@gmail.com

## Experience

Lunarpages Web Hosting, La Habra, CA

*Jr. Programmer* – August 2005 – Present

- Developed Dedicated Server Management system for integration into billing management system.
- Worked on development of survey creation and results pages for company intranet.
- Add features to existing pages in billing manager with Javascript as client-side validation.

IslandBreeze Web Solutions, Corona, CA

*Programmer* – Spring 2004

- Implemented CGI scripting using Perl to process information from forms.
- Automated mail-sending from web page to clients.
- Fix problems on existing web pages.

## Projects

### PHP

- Wrote RSS feed parser for personal homepage using Document Object Model (DOM), Xpath and XML data. Used MySQL database to keep track of user information.
- Administrative Lead for a PHP-based web driven content management application that used XML files to store data.
- Wrote guestbook application for personal web site.

### C++

- Developed a dynamic schedule generator with a team of 3, which allowed users to convert weekly schedules to a sorted daily schedule in plain text or XHTML compliant format.
- Wrote a C++ calculator program with support for nested algebraic expressions and multiple variables.
- Rewrote Linux Kernel to add support for the Earliest Deadline First algorithm of process scheduling.
- Wrote an application to solve the vertical line stabber problem. Used OpenGL to display said line.

### Java

- Constructed a Java Interface to a PostgreSQL database. The application allowed for queries into sample data consisting of information about clubs and organizations in the college of engineering.

### Python

- PyBM, a Python based BibTeX database manager with add, edit, and delete capabilities, as well as a bibliography search by keyword.
- Built an interpreter and compiler that parsed “SIMPLE” code and interpreted the code at runtime or compiled it into assembly code.
- Built simulator for ants provided by “Dinner with the Ambients” 2004 ICFP programming contest.

### Perl

- Scripted random background generator tool to randomly replace background file with another from same directory.
- Scripted tool to find duplicate files in a filesystem.
- Wrote script to replace every instance of a word with another word.

## Coursework

C++ Programming

Data Structures and Algorithms

Theory of Automata

Software Engineering

Software Construction

Circuits and Logic Design

Compiler Design

UNIX System Administration

Database Management Systems

Operating Systems

Programming Languages

Computational Geometry

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## Education

- **University of California, Riverside**  
*Bachelor of Science, Computer Science*  
July 2005

## Leadership

- President, National Society of Black Engineers (UCR)
- President, California Scholarship Federation (BHS)

## Other Positions

Studio Associate (7/03-11/04) - Cashiered for studio, took senior photograph orders, coordinated photographers and customers

AVID Tutor (9/03 – 6/04) - Facilitate tutorial sessions using Inquiry-based method.

Mentor (8/01-5/03) - Provided advice on transition to college from High School.

Cashier/Cook (5/01-5/02) – Prepare food and handle orders from customers.

Tutor(1/05-4/05) – Instruct 12 third graders in math and language arts concepts.

IAP Facilitator(1/05-Present) – Inspect transcripts and calculate GPA