

# *Kaanon MacFarlane*

## Objective

Position in Software Development

## Education

University of California, Riverside    July 2005  
B.S, Computer Science                    GPA 2.8

## 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,

## Skills

Proficient in C++, PHP, Python ,Perl/CGI scripting; Experienced in the Linux/UNIX environment, Microsoft Windows, Microsoft Office, MS Visual C++, XHTML coding experience, AutoCad, PostgreSQL

## Experience

### **Programmer**

March 2004 to April 2004  
IslandBreeze Web Solutions, Corona CA

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

### **Lunarpages Web Hosting**

August 2005 to Present  
Lunarpages Web Hosting, La Habra, CA

- 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.

## Leadership

- President, National Society of Black Engineers (University of California, Riverside: 2004-2005)
- Public Relations Chair, National Society of Black Engineers (University of California, Riverside: 2003-2004)
- Volunteer, Associated Student Program Board (University of California, Riverside: 2002-2003)
- President, California Scholarship Federation (Bloomington High School:2000-2001)
- Associated Student Body Treasurer, Historian (Bloomington High School:1999-2001)

## 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.

## **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.

## **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.