Eric C. Hawkes

3790 El Camino Real #381 echawkes@cs.stanford.edu
Palo Alto, CA 94306 (415) 497-5426
http://www-cs-students.stanford.edu/~echawkes/eh.html

Objective A position in software application development.

Education

Stanford University; Stanford, California GPA: 3.8/4.0
M.S. in Computer Science (expected June, 1998). Coursework in compilers, operating systems, data structures, algorithms, TCP/IP, concurrency and threaded programming, theory, languages.

University of Michigan; Ann Arbor, Michigan GPA: 3.8/4.0
M.S. in Nuclear Engineering (December, 1990). Master's Project and Research Assistantship: used custom software on Apollo Unix system to model nuclear reactor accidents. Came to understanding of theory behind the code, used code to model various transients, wrote paper on results of analysis.

Oregon State University; Corvallis, Oregon GPA:3.7/4.0
B.S., B.A. in Nuclear Engineering (June, 1989). Senior Project: ported large reactor physics simulation program from CDC mainframe to Wintel platform.

Work Experience

Pacific Northwest National Laboratory Richland, Washington
Research Engineer Jan., 1991 - Present

Managed a budget of $120,000 and supervised two employees in the process of analyzing the radionuclide content and hydrogen generating capacity of ion exchange columns in K-Basin at Hanford. Project included running extensive simulations on a DEC 3100 running Unix.

Managed a budget of $50,000 and supervised one employee in the process of preparing an extensive document detailing the physical construction of non-fuel assembly reactor components used in the commercial nuclear power industry.

Ran extensive simulations on DEC and Vax computers to analyze static and dynamic neutronic reactor designs. Became proficient in the use of the EMERALD (a global simulator), WIMS (a lattice simulator), and GLASS programs.

Performed Validation and Verification of several computer programs on DEC and HP workstations. Programs included EMERALD, NITAWL, XSDRN, and KENO.

Used DEC and HP workstations to perform criticality safety analysis for transportation and storage of spent fuel and other fissile wastes from B-Cell at Hanford. Used SCALE software and standard accident modes.

Languages/ Platforms

C, C++, Java, 68K Assembly, MIPS Assembly, Lisp, ML, FORTRAN, Basic
Unix (Sun, HP, DEC, Convex), Apple Macintosh, Wintel, Vax running VMS, CDC Cyber Mainframe

Publications

Lee, J.C., Rank, P.J., Reifman, J.R., Hawkes, E. C., and Wehe, D.K., "Detection and Diagnosis of Abnormal Transients in Nuclear Power Plants," Proceedings of the Brazilian Meeting on Reactor Physics and Thermal Hydraulics, VIII ENFIR, September, 1991.

Hawkes, E.C., "Physical Characteristics of Non-Fuel Assembly Reactor Components," PNL-8425, prepared by Battelle Pacific Northwest Laboratories for the U.S. Department of Energy, November, 1992.