Improving HPC Development through Empirically Guided Analysis

A Proposal to:

Advancing University Research with High Performance Computing (HPC) through Increased Student Engagement

Philip Johnson Collaborative Software Development Laboratory Department of Information and Computer Sciences University of Hawaii

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Understanding HPCS development through automated process and product measurement	
Hackystat, Philip Johnson and Michael Paulding, Proceedings of the Second Worksho	p on
Productivity and Performance in High-End Computing	

Application for Advancing University Research with High Performance Computing (HPC) through Increased Student Engagement

Instructions: Please complete the fields below. Mail, fax or email a signed and scanned copy as an attachment, to Dr. Susan T. Brown, 2532 Correa Rd., Building 37, Honolulu, HI 96822, stbrown@hawaii.edu, along with the 2-page project summary. (Summary may be an electronic attachment.)

Faculty Sponse	or (Proposer):
Name:	Philip Johnson
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Campus:	Manoa
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Student:	
Name:	Michael Paulding
Undergraduate	Graduate X
Dept:	Information and Computer Sciences
Campus:	Manoa
Email:	mpauldin@hawaii.edu
Academic Yea	r 2005-6 X Summer 2005

Title of Project: Improving HPC Development through Empirically Guided Analysis

Amount Requested: \$20,928 (\$18,198 salary + \$2,730 fringe)

Basis of amount requested for direct student support, with reference to University student employment guidelines and pay schedules (e.g., undergraduate student at step A4-1 with payrate X for Y hrs/wk for Z week): **Graduate research assistantship GA-5 for one year at 20 hours/week**

Description of any non-financial resources requested to execute the project (expected usage of HPC resources, software licenses, technical help): Expected usage of HPC resources includes access to clusters for development of software and gathering of experimental data, and reasonable level of tech support for hardware/software issues encountered.

How project will use the MHPCC resources:

Development of software and gathering of experimental data as described in the project proposal.

Signatures:	
Faculty Sponsor – I agree to supervise this student in the execution of the proposed proposed.	oject
Signature: Date:	
Student: I agree to work under the supervision of the faculty sponsor in the execution proposed project.	of the
Signature: Date:	-
Fiscal Officer - I have reviewed the amount requested and agree that it is the appropri required for student employment according to standard University of Hawaii administrate procedures. I further agree to administer the student employment and any other activity proposed.	rative
Signature: Date:	
Please refer any questions to Sue Brown at 956-2808 or email stbrown@hawaii.edu.	
Summary of Project (maximum 2 pages) describing technical background, work to be relevant qualifications of the faculty sponsor and proposed student to execute the work background on any additional assistance requested. Attachments may be included (sturesume, faculty CV, related publications) but are not required.	ζ,