## Assessing HPCS Productivity with Purpose-Based Benchmarks at MHPCC

### 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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Resume (Michael Paulding)	
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## 2004 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 Spons	or (Proposer):		
Name:	Philip Johnson		
Dept.	Information and Computer Sciences		
Campus:	<del>-</del>		
Phone:	808 956-3489		
Email:	johnson@hawaii.edu		
Student:			
Name:	Michael Paulding		
Undergraduate	e Graduate _X		
	Information and Computer Sciences		
Campus:	Manoa		
Email:	mpauldin@hawaii.edu		
Academic Yea	nr 2004-5 <u>X</u> Summer 2005		
Title of Projec	t: Assessing HPCS productivity with Purpose-Based Benchmarks at MHPCC		

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 Truss Optimizer PBB and reasonable level of tech support for hardware/software issues encountered.** 

How project will use the MHPCC resources:

Development of Truss Optimizer PBB as described in the project proposal.

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

Signatures:	
Faculty Sponsor – I agree to supervise the proposed.	is student in the execution of the proposed project
Signature:	Date:
Student: I agree to work under the super- proposed project.	vision of the faculty sponsor in the execution of the
Signature:	Date:
required for student employment according	ount requested and agree that it is the appropriate amount ng to standard University of Hawaii administrative the student employment and any other activities
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 done, relevant qualifications of the faculty sponsor and proposed student to execute the work, background on any additional assistance requested. Attachments may be included (student resume, faculty CV, related publications) but are not required.