

*EXPANDING THE COMPUTER SCIENCE PIPELINE  
VIA COHORT CLUSTERS IN WATERFIELD STUDENT HOUSING CAMPUS AT IPFW*

PROPOSAL TO  
PROFESSIONAL ADVISORY BOARD  
DEPARTMENT OF COMPUTER SCIENCE  
INDIANA UNIVERSITY – PURDUE UNIVERSITY FORT WAYNE  
MARCH 26, 2004

**Proposal**

CS PAB members fund merit-based scholarships to provide assistance in establishing “cohort clusters” of newly-enrolled Computer Science majors in four-bedroom two-bath accommodations in the new residence halls at IPFW, effective in the Fall, 2004, for a period of one or two years, in return for working as a summer intern once or twice (at normal rate). Of particular interest are females and under-represented minorities.

**Rationale**

Enrollments in Computer Science nationwide and at IPFW are declining, despite an increasing demand for software professionals world-wide. The decline is particularly acute for women and under represented minorities. One strategy is to provide financial assistance to such students using the attractiveness of on-campus housing in the brand-new residence halls, and to provide unique opportunities for continuing support from each other and the CS department and CS PAB.

**Application Process**

CS PAB members and the CS department would collaborate on developing an awareness of such scholarships. This could take the form of visits to high schools, guidance counselors, newspaper articles, visits from admissions staff, web-site announcements, posters, etc. with applications being provided in person and on-line. *Possible* criteria to accompany the application could include:

- Cover letter from applicant
- Three references from non-family sources
- Total SAT  $\geq$  1100: Verbal SAT  $\geq$  550; Math SAT  $\geq$  550
- ACT Composite Score  $\geq$  24: ACT Math  $\geq$  24; ACT Verbal  $\geq$  24
- Eight units of English in high school
- Eight units of both lab sciences and mathematics in high school

The CS department would collect all applications by a specified deadline, ensuring the pool meets IPFW and CS academic requirements. The pool of qualified applicants would be provided to the CS PAB. CS PAB members would review redacted applications, and arrange interviews. Letters of acceptance would be sent from the CS department, with associated signatures from PAB members.

**Student Responsibility**

- Must agree to work one or two terms, including summers, as an intern with a PAB member, for which they would be paid at a normal rate for interns, in return for a one or two scholarship.
- Must be an active part of a learning community, e.g., during the school year, attend and present at meetings in the residence hall “community center” or on campus to learn about the computing profession, as well as how to succeed in CS @ IPFW.
- Maintain a “B” average in all CS courses.
- Participate in on-going evaluation process
- Other, as required by the CS department and CS PAB members

**Investment**

10 month rental is \$400/month per student for a total of \$4000/academic year; summer is \$400/month  
Four bedrooms, two bath arrangements, each bedroom with Internet access

See website at [www.ipfwstudenthousing.com](http://www.ipfwstudenthousing.com)

Scholarship would cover 50% of this, or \$2000/year per student for a two-year maximum  
A PAB member could fund one or more scholarships.

**Initial Goal for Fall, 2004**

Fund scholarships for at least 12 new female and minority CS majors.