Call For Participation

Software Engineering Ethical and Professional Standards

JOINT IEEE COMPUTER SOCIETY / ACM PROJECT WORKING GROUPS FORMING

The IEEE Computer Society and the ACM, the world's two largest organizations of computing professionals, with a combined membership of more than one hundred and seventy-five thousand members (worldwide) have established a Joint Steering Committee for the Establishment of Software Engineering as a Profession. This steering committee has established three tasks forces to accomplish their mission. One task force is identifying the body of knowledge and recommended practices. and another task force is addressing educational issues. Our task force on Software **Engineering Ethics and Professional Practices** (SEEPP) is tasked with documenting and codifying standards Of ethical and professional practices for Software Engineers. We invite your participation in this task. You do NOT need to be a member of either society in order to participate. member

1.0 SCOPE These standards shall document generally accepted principles for identifying and resolving ethical conflicts relevant to the discipline of software engineering.

Consideration shall be given to the responsibilities and obligations of the Software Engineer to peers and laypersons. employer. customer(s), the profession and society/humanity. Additionally, consideration shall be similarly given to the obligations and responsibilities of these various entities towards the Software Engineer.

1.1 GLOBAL. APPLICATION

The SEEPP task force recognizes that the design, development and application of software often transcend national boundaries. We feel that it is vitally important that the global computing

community have the means to insure that this project produces a product which is as reflective of the global computing community's wisdom as can be reasonably achieved. The participation of individuals from throughout the \boldsymbol{WOrld} is important to achieving this goal.

These standards are intended to document the consensus of the global software engineering community. From time to time, consensus on an issue may not be clearly recognized. Accordingly, these standards shall also document various recommended practices and guidelines when no clear consensus can be established.

2.0 PURPOSE The purpose of the SEEPP task force is to document the international consensus for minimally acceptable ethical/professional responsibilities and obligations of Software Engineers.

3.0 ORGANIZATION Working groups are being formed to address specific areas of concern. Eight different subject areas are distinguished so far, as described below. Should additional subject areas be identified, additional working groups may be established.

Working groups and illustrative issues/topics:

Institutional Support. "Experts Hotline," peer review panels. conflict resolution, etc. for practicing software engineers. (Chair: Michael McFarland mcfarlan@bcuxs2.bc.edu

Intellectual Property. Ownership of: code, algorithms, systems design and specifications, project control methods, test methods, quality improvement models, etc., articulate areas that go beyond the law, foster understanding by sharing values and ideals. what issues and norms are important for SE, how to carry out ethical activity (foundational basis of laws and treaties, why obey laws). (Chair: Suzanne Weisband sweisband@bpa.arizona.edu Vice Chair: Steven Barber sbarber@panix.com

Professional Competence. Truth about skill, obligation to keep current. truth about code, what should be produced? (end-use consequences), keep staff current, appropriate knowledge base, non-

generalization of expertise. educational issues: certification. registration, licensure. (Chair: Donald Gotterbarn d.gotterbam@computer.org).

Professional Relationships. Communications (professional to professional and professional to layperson or society, professional to employer, professional to customer. professional to electronic community), support for "whistle blowers," obligations to foster responsible behavior amongst non-professionals. (Chair: Joyce Currie Little jclittle@toe.towson.edu)

Privacy. Monitoring (workplace, every place). confidentiality. data aggregation. falsification or communication of a "digital persona" out of context, misuse of data, relationship of electronic privacy to other policy issues. e.g., computerized medical records and health care reform, etc. (Chair: Patrick Sullivan psullivan@brook..edu)

Reliability & Safety. Contracts. reliability thresholds in contracts, testing, risks, user centered design. truth in advertising, informed consent for buyers, financial support for improved quality, quantifying quality. (Chair: Keith Miller miller@eagle.sangamon.edu) 1

Security. Data integrity, statutory violations, encryption, malicious programming (viruses. etc.). system administrator's responsibility. encryption. (Chair: Bob Melford r.melford@computer.org)

Social Justice. Responsibility to end user. equity of access, allocation of resources, computing for the disabled, "de-skilling" (computer takes over a person's job). (Chair: Suzanne Weisband sweisband@bpa. arizona. edu)

3.1 PARTICIPATION

Participation is open to all individuals who are directly and materially affected or interested in these issues. Members of the international computing community are particularly encouraged to participate.

3.1.1 WORKING GROUP MEMBERSHIP Individuals may participate in as many working groups as they desire.

3.1.2 ORGANIZATIONAL/INSTITUTIONAL PARTICIPATION

If organizations desire to send an organizational representative. they shall be accommodated. Their inputs will be valued and processed as would any other input. However, no organization shall be permitted a veto power over results that reflect the consensus of the concerned professionals in the field.

3.1.3 WORKING GROUP MEMBERSHIP APPLICATION

PLEASE COMPLETE THE APPLICATION AT THE END OF THIS DOCUMENT AND E-MAIL IT TO:

SEEPP-CFP@COMPUTER.ORG

3.1.4 EXPENSES

Participation is voluntary. Each individual is responsible for all expenses incurred to support his/her participation. Many institutions provide financial support for their volunteers.

3.2 "OFFICIAL" IEEE STANDARD

Working groups will operate according to the prams specified for IEEE. Standards (see Governance, below). However, working groups will NOT be initially chartered by the IEEE Computer Society's Standards Activities Board. (If the working groups were so chattered. individuals in several countries would be required to receive their government's approval for participation.)

3.3 GOVERNANCE

The conduct of each working group shall follow the same written procedures that govern internationally recognized IEEE Standards Activities. These procedures specify that prompt consideration should be given to the written views and objections of all participants. Objectors should be notified of the disposition of an objection and the reasons therefor. Unresolved objections and the associated reasons should be reported to the entire working group's membership. The conclusions of the group should be supported by a consensus of the membership. (This would imply a ballot on the final products, probably run as IEEE Draft Standards ballots are currently run.)

3.4 E-MAIL & MEETINGS

Working group business is expected to be primarily 'conducted via e-mail and computer mediated conferencing. From time to time. a working group may also conduct face to face or teleconference meetings. These meetings should be conducted in a manner which facilitates attendance by as many members as possible.

4.0 INTERNET ACCESS

Each working group member should have a valid Inter net a -mail account. The member should also be prepared to obtain access to other Internet applications such as FIT, TELNET, Gopher, WAIS WWW/MOSAIC, etc.

5.0 COMPLETION

Working groups, shall deliver their product to the SEEPP task force before November 1995. 6.0 THANK YOU! We hope that we have piqued your interest and that you will join us in this endeavor! Sincerely.

Joint IEEE-CS/ACM SEEPP Task Force Robert J. Melford IEEE-CS Co-Chairman r.melford @computer.org Donald Gotterbarn, Ph.D. ACM Co-Chairman d.gotterbarn@ccomputer.org

The Application Form is on the neat page.

Application Form

IEEE-CS/ACM SOFTWARE ENGINEERING ETHICS AND PROFESSIONAL PRACTICES (SEEPP)

RETURN TO: seepp-cfp@ computer.org

FOR MORE INFORMATION CONTACT: seepp-cfp@computer.org

Please place an "X" next to each working group that you wish to join:

Institutional Support Intellectual Property Professional Competence Professional Relationships

Privacy Reliability & Safety

Security
Social Justice

Please tell us what your Category of Interest is in this project:

Individual Professional Academic End User/General Interest Organizational Representative

SURNAME/FAMILY NAME: FIRST/GIVEN NAME: MIDDLE INITIAL:

IEEE Computer Society or ACM Membership Number(s): IEEE Computer Society #: ACM Membership Number:

Please place an "X" here if you are - NOT a member of either society.

Which address should we use for e-mail?

Office/Home

Which address should we use for postal mail?

Office/Home

OFFICE:

TITLE/POSTITON: EMPLOYER: ADDRESS: MAIL STOP: CITY: STATE/PROVINCE: POSTAL CODE: COUNTRY:

TELEPHONE:

E-MAIL:

HOME: ADDRESS:

CITY:

STATE/PROVINCE: POSTAL CODE: COUNTRY: TELEPHONE: E-MAIL:

IMPORTANT -- Please tell us about your specific interests and how your experience will aid this project.