# CS-480—Senior Seminar Study questions for *Software Engineer Licensing* Fall '03

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### **Primary Papers**

Knight, John C. and Nancy G. Leveson "Should Software Engineers Be Licensed?" *Communications of the ACM*, Vol. 45, No. 11, pp. 87–90, November, 2002.

White, John and Barbara Simons "ACM's Position on the Licensing of Software Engineers." *Communications of the ACM*, Vol. 45, No. 11, pg. 91, November, 2002.

Bagert, Donald J. "Texas Licensing of Software Engineers: All's Quiet, For Now." *Communications of the ACM*, Vol. 45, No. 11, pp. 92–94, November, 2002.

Kennedy, Ken and Moshe Y. Vardi "A Rice University Perspective on Software Engineering Licensing." *Communications of the ACM*, Vol. 45, No. 11, pp. 94–95, November, 2002.

Parnas, David Lorge "Licensing Software Engineers in Canada." *Communications of the ACM*, Vol. 45, No. 11, pp. 96–98, November, 2002.

McCalla, Gord "Software Engineering Requires Individual Professionalism." Communications of the ACM, Vol. 45, No. 11, pp. 98–101, November, 2002.

Reddy, Saveen "Should computer scientists worry about ethics? Don Gotterbarn says, "Yes!"" *ACM Crossroads*, Vol. 1, No. 4, (unnumbered), May, 1995.

Mucklestone, Connie "Roundtable looks at issue of licensing software engineers." Electronic Frontier Canada, 1/Jan/98, <a href="http://www.efc.ca/pages/media/engineering-dimensions.01jan98.html">http://www.efc.ca/pages/media/engineering-dimensions.01jan98.html</a>, accessed Sept. 2003. Also in *Engineering Dimensions*, Jan/February, pp. 28–29, 1998.

DeMarco, Tom "Letter to the Editor On Certification." Cutter Consortium, July1998, <a href="http://www.systemsguild.com/GuildSite/TDM/certification.html">http://www.systemsguild.com/GuildSite/TDM/certification.html</a>, accessed 3 September 2003. Also in *Cutter IT Journal*, Vol. XI, No. 7, (Page numbers missing), July 1998.

## Additional Papers

ACM/IEEE-CS Task Force on SEEPP "Software Engineering Code of Ethics and Professional Practice (Version 5.2)." Association for Computing Machinery, 1999, <a href="http://www.acm.org/serving/se/code.html">http://www.acm.org/serving/se/code.html</a>, accessed Sept. 2003. Denning, Peter J. "The Somatic Engineer." Association for Computing Machinery (Ubiquity), 2000, <a href="http://www.acm.org/ubiquity/views/p\_denning\_2.html">http://www.acm.org/ubiquity/views/p\_denning\_2.html</a>, accessed 3 September 2003.

#### Communications of the ACM

- 1. What process/licensing is necessary to become a professional engineer?
- 2. Who is exempt from necessary licensing?
- 3. How can licensing software engineers be detrimental to the field? How can this make a positive contribution?
- 4. What makes engineering a self-regulating profession?
- 5. What might the social repercussions of licensing software engineers be? How would this institutionalization affect both the engineering and scientific branches of the software profession?

#### Gotterbarn

- 1. In the view of Don Gotterbarn, why should certification and/or licensing exist in the software field?
- 2. How does licensing encourage educations, and what type of education does licensing encourage?
- 3. How is viewing professionalism (e.g. licensing, certification, etc.) as social consciousness affecting the software field? What other factors should be considered concerning social consciousness in this context?

#### Roundtable

- 1. Do you think that software engineering as it stands now is more art than science? How does this relate to Levi Strauss' notion of bricolage?
- 2. How does this article raise the question of software science rather than software engineering?

- 3. Is licensing applicable to all software engineers?
- 4. What are some factors driving the push for licensing? Who would benefit most from...?

## DeMarco

- 1. How are the results of certification different in DeMarco's point of view when compared to those of Gotterbarn?
- 2. If certification was established, what are the problems with decertification?