CALL FOR PAPERS

First International Conference on

Certified Programs and Proofs
(CPP 2011)

December 7–9, 2011, Taiwan

`http://formes.asia/cpp`

(co-located with APLAS 2011)

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CPP is a new international forum on theoretical and practical topics in all areas, including computer science, mathematics, and education, that consider certification as an essential paradigm for their work. Certification here means formal, mechanized verification of some sort, preferably with production of independently checkable certificates. We invite submissions on topics that fit under this rubric.

Suggested, but not exclusive, specific topics of interest for submissions include: certified or certifying programming, compilation, linking, OS kernels, runtime systems, and security monitors; program logics, type systems, and semantics for certified code; certified decision procedures, mathematical libraries, and mathematical theorems; proof assistants and proof theory; new languages and tools for certified programming; program analysis, program verification, and proof-carrying code; certified secure protocols and transactions; certificates for decision procedures, including linear algebra, polynomial systems, SAT, SMT, and unification in algebras of interest; certificates for semi-decision procedures, including equality, first-order logic, and higher-order unification; certificates for program termination; logics for certifying concurrent and distributed programs; higher-order logics, logical systems, separation logics, and logics for security; and teaching mathematics and computer science with proof assistants.

Important Dates: Authors are required to submit a paper title and a short abstract before submitting the full paper. The submission should include when necessary a URL where to find the formal development assessing the essential aspects of the work. All submissions will be electronic. All deadlines are at midnight (GMT).

Abstract Deadline: Friday, June 17, 2011
Submission Deadline: Tuesday, June 21, 2011
Author Notification: Monday, August 29, 2011
Camera-ready Papers Due: Monday, September 19, 2011.

Submission Instructions: Papers should be submitted electronically online via the conference submission web page at URL:

`http://www.easychair.org/conferences/?conf=cpp2011`

Acceptable formats are PostScript or PDF, viewable by Ghostview or Acrobat Reader. Submissions should not exceed 16 pages in LNCS format, including bibliography and figures. Submitted papers will be judged on the basis of significance, relevance, correctness, originality, and clarity. They should clearly identify what has been accomplished and why it is significant. The proceedings of the symposium is planned to be published as a volume in Springer-Verlag's Lecture Notes in Computer Science series. Submission instructions including LATEX style files are available from the CPP 2011 website.

Each submission must be written in English and provide sufficient detail to allow the program committee to assess the merits of the paper. It should begin with a succinct statement of the issues, a summary of the main results, and a brief explanation of their significance and relevance to the conference, all phrased for the non-specialist. Technical and formal developments directed to the specialist should follow. Whenever appropriate, the submission should come along with a formal development, using whatever prover, e.g., Agda, Coq, Elf, HOL, HOL-Light, Isabelle, Matita, Mizar, NQTHM, PVS, Vampire, etc. References and comparisons with related work should be included. *Papers not conforming to the above requirements concerning format and length may be rejected without further consideration.*

The results must be unpublished and not submitted for publication elsewhere, including the proceedings of other published conferences or workshops. The PC chairs should be informed of closely related work submitted to a conference or journal in advance of submission. Original formal proofs of known results in mathematics or computer science are among the targets. One author of each accepted paper is expected to present it at the conference.

Award for Best Paper: An award will be given for the best accepted paper, as judged by the program committee. Details concerning eligibility criteria and procedure for consideration for this award will be posted at the CPP website. The committee may decline to make the award or split it among several papers.