

CMSC 330: Organization of Programming Languages

Guy Steele
Growing a Language
OOPSLA 1998

Guy L. Steele, Junior

► Education

- 1975 – Harvard BA in Applied Math
- 1980 – MIT PhD in Computer Science

Has a lot of experience in
implementing and designing
programming languages



Guy L. Steele, Junior

- ▶ Contributions
 - Developed Scheme
 - Version of LISP with static scoping
 - Designed original command set of Emacs
 - Using LISP syntax
 - Developed specification for Common LISP
 - Developed parallel version of Lisp (*Lisp) and C (C*)
 - While at Thinking Machines
 - Co-authored The Java Language Specification
 - While at SUN Microsystems
 - With Gosling, Joy, and Bracha
 - Co-authored The High Performance Fortran Handbook

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OOPSLA 1998 Talk

- ▶ OOPSLA
 - Object-Oriented Programming, Systems, Languages & Applications
 - Annual ACM SIGPLAN conference
- ▶ “Growing a Language”
 - Programming languages must start small to get users
 - Languages must add features to become more useful
 - New features should integrate nicely into existing language
 - Java should add user generic types & overloading

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