

## Contact

[www.linkedin.com/in/jamesgosling](http://www.linkedin.com/in/jamesgosling)  
(LinkedIn)  
[nighthacks.com/roller/jag](http://nighthacks.com/roller/jag) (Blog)  
[www.google.com/search](http://www.google.com/search) (Other)

## Top Skills

Mac  
Internet of Things (IoT)  
Graphics

## Honors-Awards

John Von Neumann Medal  
Fellow  
Officer of the Order of Canada  
Member  
Software Systems Award

## Publications

The Algebraic Manipulation of  
Constraints  
Oak (Java) Language Specification  
v0.2

## Patents

"Method and apparatus for  
automatically archiving and clearing  
intellectual property"

# James Gosling

Software Engineer  
Redwood City, California, United States

## Summary

I've worked on all kinds of software, from ground analysis for telemetry from the ISIS II satellite to the original Unix Emacs, the NeWS window system, and the Java Programming language. My PhD thesis was on "The Algebraic Manipulation of Constraints". I had some wonderful years at Sun Microsystems, where I was best known as the original developer of the Java programming language. I spent over 5 years hacking the control software of autonomous ocean-going robots. I've just finished 7 years at Amazon Web Services and I'm now retired.

Specialties: Graphics, Languages, Embedded Systems, Distributed Systems, ...

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## Experience

Amazon Web Services  
Distinguished Engineer  
May 2017 - July 2024 (7 years 3 months)  
Palo Alto, CA

I mostly worked on IoT projects. A product that I initiated and launched is AWS Greengrass, <https://aws.amazon.com/greengrass/>

Liquid Robotics  
Chief Software Architect  
August 2011 - May 2017 (5 years 10 months)  
Sunnyvale, California

Hacking ocean-going robots and housing their data in a cloud.

DIRTT Environmental Solutions  
Director  
2003 - May 2017 (14 years)  
Member of the board of directors.

Google  
Software Engineer  
March 2011 - August 2011 (6 months)  
Free-floating curmudgeon

Sun Microsystems  
26 years

Fellow & CTO of Client Software Group  
1984 - April 2010 (26 years)

Oversaw the developing engineering of later versions of Java; lots of public appearances and presentations to customers.

Engineer  
1984 - 2010 (26 years)

NeWS window System; assorted graphics rendering routines; then Java...

Sun Labs  
VP and Fellow

January 1999 - January 2002 (3 years 1 month)

Research on semantically driven software development tools. Produced the Real

Time Specification for Java. Built the Sun Labs document archive and legal clearance system.

JavaSoft

Chief Scientist and Fellow

January 1995 - January 1999 (4 years 1 month)

Technical and business guidance of the Java efforts at Sun. Duties were fairly evenly split between business strategy, technical review and public presentations  
& evangelization.

1994!      Lead Architect, LiveOak project, Sun Labs.

Leading the engineering team in the application of FirstPerson technology to the internet. This was launched as the HotJava browser and Java programming language.

FirstPerson Inc  
Chief Scientist

January 1992 - January 1994 (2 years 1 month)

Lead design team to produce software for the consumer electronics market, particularly focused on the set-top and interactive television solutions. Effort included developing a runtime for set-tops and content development and preparation tools.

## FirstPerson

Engineer

1992 - 1994 (2 years)

Did general software engineering, including the design and implementation of the Oak programming language, which was eventually renamed to Java.

## Green project, Sun Labs

Lead Architect

January 1991 - January 1992 (1 year 1 month)

Investigated software requirements, designed, implemented and demonstrated prototype of a consumer electronics software platform. Oversaw all software development including the guidance of a 12 person team. Personally implemented

a compiler for a safe, multi-threaded, distributed, object-oriented programming language (related to C++) named Oak. Very positive customer response lead to

the formation

## Window Systems

Lead Architect

January 1984 - January 1989 (5 years 1 month)

Designed and implemented the Networked Extensible Window System (NeWS), a

distributed window system based on PostScript. The PostScript language was used as the basis for interprocess communication, allowing computation to migrate from the client to the server. This included writing a complete PostScript

clone and guiding the Folio hinted font scaling technology. The combination of the

PostScript clone and the font scaling technology enabled Sun to create software

to drive inexpensive printers using the CPU power of the desktop, thus instigating

sun's printing business.

## IBM

### Engineer

January 1983 - August 1984 (1 year 8 months)

Worked on loan to the CMU/ITC project & consulted on the PC/RT product from IBM. If only that had listened to me!!

## J.Watson Research Center

### Member of Technical Staff T

January 1983 - January 1984 (1 year 1 month)

Designed and implemented the Andrew window system (the first distributed window system) and the Andrew user-interface toolkit (the first document based object oriented toolkit)

## Carnegie Mellon University - ITC

### Engineer

1983 - 1984 (1 year)

Designed and implemented the first version of the Andrew window system and user interface toolkit.

## CMU

### Graduate Student

1977 - 1983 (6 years)

PhD in computer science; Ported BSD unix to a 16 CPU symmetric multiprocessor built from PDP11/40Es; implemented Unix Emacs; which eventually became GNU emacs; implemented a Pascal compiler on Multics (a contract job); Designed and implemented a compiler for a language called MUMBLE for a wide-instruction horizontal bit-slice microprocessor (truly a bizarre, but fast, machine)

## Herminet Inc

### Software Engineer

1981 - 1982 (1 year)

Designed and implemented an intelligent mail handling system. This eventually became the MHS system from Action Technologies.

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## Education

Carnegie Mellon University

PhD, Computer Science · (1977 - 1983)

Carnegie Mellon University

MS, Computer Science · (1977 - 1983)

University of Calgary

BSc (Honors), Computer Science · (1973 - 1977)