

Holly G. Gates

Address

189 Summer St. apt 2
Somerville, MA 02145
<http://www.positron.org>

Experience

E INK CORP. Cambridge, MA

Senior Hardware Engineer 4.2002 - present

Hardware Engineer 6.1998 - 4.2002

Integration of electronic ink material with electronics and systems. Work intimately with both scientists and engineers developing the material, as well as customers and partners building devices based on our technology. Circuit design, advanced packaging, board layout and construction, embedded linux development, embedded system design, code development, industrial design, integration with customer systems, VHDL, interface design, ethernet and pager communications, custom IC specification, display module design and construction, test equipment design and construction, agency approvals of products in design, and IP generation.

MIT MEDIA LAB 3.1996 - 6.1998 Cambridge, MA

Prototyping and development work for reusable thermal paper and circuits on paper projects. Designed and fabricated a 3 dimensional plasma spray apparatus, pneumatic automation equipment for a fluid printer, and several thermal plotters. These projects demanded extensive machining of metals and plastics, implementation of microprocessor controlled motion systems using stepper motors, and interfacing a computer to various serial devices.

ZOND SYSTEMS INC. 6.1997 - 8.1997 Searsburg, VT

Construction, troubleshooting, and repair of 6MW wind power plant. Worked with cranes and other heavy equipment to erect turbines. Troubleshooting and repair of elements such as SCADA system, distributed processor turbine controller, SCR power switching system, hydraulic pitch position controller, and intra-turbine data and control networks.

MIT EDGERTON CENTER 8.1996 - 12.1997 Cambridge, MA

Main lecturer for freshman seminar "Introduction to Digital Electronics".

BROWN INNOVATIONS INC. 10.1995 - 2.1996 Boston, MA.

Production and development of specialized audio equipment. Tasks include programming, assembly, and prototyping.

Education

HARVARD UNIVERSITY EXTENSION 2002-2003 Cambridge, MA

Two semesters Japanese language.

MASSACHUSETTS COLLEGE OF ART 2001-2002 Boston, MA

Two semester course in fashion design.

MASSACHUSETTS INSTITUTE OF TECHNOLOGY 1994-1998 Cambridge, MA

BSEE Course 6.2, Class of 1998. GPA 4.95/5 Transcript available on request

WEIHAI BRANCH OF SHANDONG UNIVERSITY 1995 Shandong Province, P.R.China

Enrolled as a foreign student in Chinese Language.

Patents

US 6,504,524

Addressing methods for displays having zero time-average field

EP1127309

Broadcast System for Display Devices Made of Electronic Ink

US APPLICATION 20030020844 (PENDING)

Microencapsulated electrophoretic display with integrated driver

US APPLICATION 20020090980 (PENDING)

Displays for portable electronic apparatus

OTHER

Several other applications pending in the EU and Japan. More US applications to be generated as things churn through the corporate IP process.

Publications

IDW02 AMD2/EP1-3 2002
Development of Active Matrix Electronic Ink Display Modules for Smart Handheld Applications
A.Henzen M.Pitt M.Yasui W.Dijkman K.Amundson R.Zehner H.Gates

EURODISPLAY INVITED ADDRESSES 15-2 2002
Card-size Active-matrix Electronic Ink Display
P.Kazlas A.Ritenour J.Au Y.Chen J.Gooman R.Paolini H.Gates

IDW02 AMD2/EP1-2 2002
Ultra-Thin 3.2-in. Active-Matrix Electronic Ink Display for Mobile Devices
J.Au Y.Chen A.Ritenour P.Kazlas H.Gates

SID DIGEST 53.1 2002
Active-Matrix Color Displays Using Electrophoretic Ink and Color Filters
G.Duthaler, J.Au, M.Davis, H.Gates, B.Hone, A.Knaian, E.Pratt, K.Suzuki, S.Yoshida, M.Ueda, T.Nakamura

SID DIGEST 53.2 2002
Power Consumption of Micro-encapsulated Electrophoretic Displays for Smart Handheld Applications
M.Pitt, R.Zehner, K.Amundson, H.Gates

SID DIGEST 12.1 2001
12.1" SVGA Microencapsulated Electrophoretic Active Matrix Display for Information Appliances
P.Kazlas, J.Au, K.Geremita, H.Gates, M.Steiner, C.Honeyman, P.Drzaic, K.Schleupen, B.Wisnieff, R.Horton, R.John

JOURNAL OF THE AUVSI 1999
The ORCA-II: An Improved Autonomous Underwater Vehicle
many, incl. H.Gates

JOURNAL OF THE AUVSI 1998
The ORCA-I: An Autonomous Underwater Vehicle
many, incl. H.Gates

Honors

RUDENBERG MEMORIAL FUND 6/1998
For an outstanding undergraduate thesis relating to energy conversion

6.270 LEGO ROBOTICS COMPETITION 1/1998
First Prize for robot called "dog", built with Leila Hasan

ETA KAPPA NU 1998
Electrical Engineering Honor Society

Skills

COMPUTING
C, assembly, shell, linux, embedded linux, Protel, Autocad, Illustrator, Photoshop, standard office tools, system administration, web authoring

ELECTRONICS
Design and construction of analog and digital systems, PCB design, fine pitch surface mount assembly, package design, display assembly, VHDL, ethernet and pager communications, handheld system development, embedded system design, custom IC specification and sourcing, complex system debugging.

MECHANICAL
Machining, Oxyacetylene TIG and MIG welding, casting, general fabrication.

LANGUAGE
Conversational Mandarin, limited Japanese.

ADDITIONAL
Industrial Design, Graphic Design, Fashion Design, project planning, team leadership, customer relationships

Interests

Welding, renovating, dancing, mountaineering, electronics, sculpture, clothing design, fashion devices