

Rick Booth

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OBJECTIVE

Creative leadership-track work towards, preferably, one or more of the following *five* objectives:

- 1) Rolling out extremely interactive, highly **animated systems** as front ends to the world's **text-based information**.
- 2) Creating and deploying software systems that promote better access to, and better use of, **public transportation systems** – especially rail and mixed mode transit.
- 3) Combining my physician's training with software skills to build better **medical information** access, management, and training systems.
- 4) Writing **books** that demystify the complex, the new, and the forbidding – whether for the technical community or for the general public.
- 5) Using my knowledge and skills in science, engineering, medicine, transportation, linguistics, writing, and/or political lobbying **to influence Washington, DC**, actions and policies for the better.

SKILLS and EXPERIENCE

CODING: Best at C++, C, optimal DSP or assembly languages (**real-time**) + as-needed use of other languages.

PLATFORMS: Most accustomed to **Windows** environments; recently began adapting to **Unix/Linux**.

SPECIAL SKILLS: Extensive **video game** and **video engineering** background; intimately familiar with **MPEG**.

“SECRET” SKILLS: **Linguistics**, with emphasis on language evolution, acquisition, and mnemonic mechanisms.

WRITING SKILLS: Prolific, when inspired. Impassioned. Clear. **For any audience**. Poetic, when appropriate.

TRANSPORTATION: Intimately familiar with **East Coast rail systems**, politics, and related software opportunities.

POLITICS: Many lessons learned and contacts made from a year of **lobbying a moral policy** issue in **Washington**.

WORK HISTORY

Visible World

Senior Software Engineer
April '01 to present

I have created most of the low-level MPEG video and audio processing tools, including a custom stream multiplexer, to support targeted cable advertising using set-top video splicing.

WorldGate Communications

System Architect, Analog
Dec. '95 to Apr. '01

I designed the communications and graphics compression systems for, and most of the code resident on, a set-top box add-in to provide Internet access over cable TV.

Absolute Entertainment Video Games

Director, Systems Software
Jan. '89 to Dec. '89 and Apr. '93 to Oct. '95

In '89, I programmed Nintendo video games. In '93 I returned to head up the creation and management of the software systems and tools supporting game production.

Montage Video Editing Systems

Director, Digital Video
Dec. '89 to Apr. '93

I created the digital video capture and playback software for a high end professional video editing system. Much of my work was in DVI (subsequently Indeo) microcode.

Sesame Street

Technical Director, Interactive Technology
Oct. '79 to Oct. '80 and Oct. '82 to Dec. '88

In '79-'80 I wrote most of the software for a theme park computer gallery. For six years I was head of software systems and tools support for educational software.

Columbia University

Computer System Manager
Oct. '80 to Oct. '82

I managed a DEC-20 mainframe for the Teachers' College division of Columbia University, serving administration, faculty, and students, while studying instructional technology.

PUBLICATIONS

Inner Loops – authored this still-available-on-Amazon code optimization book, Addison-Wesley 1997

Programming Itanium-based Systems – co-authored book (optimization chapters), Intel Press 2001

Two communications patents granted – co-authored while at WorldGate Communications, 2000

EDUCATION

Columbia University

Education, Instructional Technology
'79-'82, 3 credits from M.A.

Was subsequently invited to submit my text animation research of '85-'88 as a doctoral thesis. Guest lectured once.

Columbia Medical School

Medicine
'77-'79, completed 2 years

Left in good standing to join the computer revolution.
Ranked at 98th percentile nationally. (national boards)

Princeton University

Chemistry
'73-'77, B.A. June 1977

Ranked 1st in class '75-'76. (Wood Prize)
Chemistry prize, Phi Beta Kappa, highest honors, nominal 4.0 GPA.
MCAT aggregate score above 99th percentile.

Career Shift: Why the job hunt? Why now?

EMPLOYMENT & LEAVE

Though **currently employed**, I have spent the **last six months on a leave of absence** from my New York City job in order to focus my full attentions and efforts on a deeply-felt moral and political issue involving Amtrak, Congressional legislation, political corruption of national rail policy, and the **needless destruction of Northeast Corridor job commuting** options for about 2,000 people in eight states – myself included.

GOAL-DIRECTED MOVE

The company I work for, like the company I worked for before that, needed my skills during the business **start-up phase** for core innovation and technical invention work, but has **matured to a maintenance mode** with very limited goals for future R&D. In that my personal goals for work and growth – including a number of long-postponed agendas of intense personal interest – cannot be realized at my present job, I have already given my current employer notice of my resignation, to be effective as of next month. I intend to make a **major career-shift move** toward work that once again **inspires me**, through which I hope to be able to **help lead and inspire others**.

APPRECIATED, BUT BOXED

In the past, my **high productivity and skill** with rapid, creative, complex system design and development has been a **two-edged sword**. On the one hand, I've been appreciated, but on the other hand, I've often found myself “warehoused” away from business decisions and top creative control, simply because I've been considered to be too valuable as a “getting-it-done” **technical asset** to be sidelined, so to speak, in management roles.

BREAKING OUT

I feel the strong need to now, however, **break the cycle** of “technical warehousing” that has kept many of what I believe are my best potential creative contributions out of sight and out of mind at companies with strict limits on their business aspirations. With benefit of the relative financial security of middle age, I intend to do the search and take whatever months necessary to find a place and a way to better use **talents, skills, and knowledge that might otherwise go to waste**.

TOWARD BEST WORK

I am not one who has ever “looked forward” to retirement, and I sincerely hope and suspect that I've got another **25 good productive years** to put towards what I imagine may be the best and most important works of my life. (epitaph material ;-)

JUST DOING IT

My recent experiences with **fighting for things I believe in** – on my own nickel – in Washington have emboldened me to do the **same with my career** now. I will be willing to **relocate** as necessary in order to move on.

Inspirational Interests Elaborated

TEXT ANIMATION

This is the oldest and most **deeply-held creative fascination** of mine, going back more than 25 years. Words begin life as **mnemonics** for things worth remembering. Yet in the very act of crystallizing into dictionaried existence, the **memories are frequently lost**. Two years in medical school taught me that recovering the lost memories, relationships, and connections embedded in written words is a **tremendously powerful way to acquire robust, memorable, global knowledge** of a discipline – and to learn language! Thus was born a fascination with visualizing the memories embedded in words; their stories; their connections to meaning. It was this fascination that **led me instead to computing** as a career, as a means toward that end. Though I was arguably about a quarter century “ahead of the curve” on this issue, I spent a number of years experimenting and mocking up tools to do **interactive word-memory visualizations**, with emphasis on visual **etymology** and both intra- and inter-language **cognates**. I documented this work in a **1988 film entitled “Dynamic Text,”** which is currently **available on YouTube under my user name, dc3rdrail**. Leveraged on a billion Internet users, I believe now, more than ever, that well-targeted real-time animated word presentation/exploration front ends on information systems can soon have an enormous **media-change impact, a la McLuhan**.

TRANSPORTATION

Successfully fighting Amtrak to keep my commuting station alive last year led to a longer political conflict over an **abusive fare change policy** (up about \$10,000 a year, pre-tax) that was born of a back room scandal in Washington. I quickly became the lead Amtrak job commuter advocate on the Northeast Corridor, the confidant of passengers and rail insiders alike. Officially appointed the **Bucks County citizen advisor** to the Southeastern Pennsylvania Transportation Authority, I have read, learned, and studied an enormous amount of material on rail transportation systems. As a derived interest, I see enormous **opportunities to improve public transportation systems’ usability** through new information technologies. See www.savecornwellsheights.com.

MEDICINE

Though I formally **left medicine in 1979**, I remember much and would certainly enjoy the chance to explore ways to improve the practice and teaching of medicine via new information technologies. **I can still play the devil’s advocate** with physiologists, pathologists, surgeons, and the endocrine guys. I am very open to taking my various skills back to medicine in **creative liaison** toward product research and development.

BOOKS

About three years after writing my first book on code optimization, **Intel spontaneously invited me** to “write the book” on their most complex new processor, the **Itanium** (code named Merced). Their new publishing division, it turned out, was using my previous book as its recommended **writing style reference** for authors. (Though I accepted the offer, delays and inconsistencies in initial processor deliveries limited my research to a few chapters in a companion book, instead.) I enjoy **writing, teaching, and explaining** – making the obscure intelligible. **It forces good research**. I learn. Others learn. I expect my next book to be about lessons in fighting City Hall in the age of the Internet, based on my extensive rail policy battles with Amtrak and Congress.

POLITICS

Having recently spent a lot of time with my **Congressman**, Senator Specter’s and Senator Santorum’s **transportation aides**, and various Washington **bureaucrats** and **lobbyists**, I’ve actually been smitten with the odd idea that **democracy can work** if good people get active and try to actually **help the people in Washington do their jobs right**. (Ask *not* what your Congressman can do for you... ;-) It’s a great feeling, trying to make the system work. I would gladly do more.