

Experience

Assistant professor, Harvard Business School. Negotiations, Organizations & Markets unit. (April 2007 – present)

Fields: Industrial organization, market design, information economics.

Research interests: Electronic markets. Internet advertising, reputation, and fraud. Automated data collection.

Teaching: Networked businesses, market design, negotiation.

Independent consultant and expert witness (November 1999 – present)

Conducted quantitative analyses and empirical testing for a variety of clients including the American Civil Liberties Union, National Association of Broadcasters, National Football League, New York Times, and Washington Post on topics including online advertising, advertising fraud, spyware, spam, pay-per-click advertising and click fraud, Internet filtering, geolocation and targeting, privacy, security, automated data collection, and user interface design. Qualified as an expert in Federal court on multiple occasions, and provided oral testimony under direct and cross examination.

Student Fellow / Technology Analyst, Berkman Center for Internet & Society (May 1998 – January 2004)

Conducted empirical studies of the Internet's domain name system, peer-to-peer filesharing, spyware/adware, content filtering by network intermediaries. Developed software systems for interactive real-time communication among class/meeting participants.

Designed and operated system for webcast of and remote participation in numerous Berkman Center, Harvard Law School, and Cambridge community events as well as twelve ICANN public meetings.

Education

Harvard Graduate School of Arts & Sciences - Ph.D., Economics, 2007.

Dissertation: "Topics in Internet Advertising." Advisors: Ariel Pakes, Alvin Roth, David Parkes.

Harvard Law School - J.D., 2005.

Harvard Graduate School of Arts & Sciences - A.M., Statistics, 2002.

Harvard College - A.B., Economics, *summa cum laude*, 2002; Phi Beta Kappa.

Woodrow Wilson Senior High School - Washington, DC: 1998; valedictorian.

Representative Research

Internet Advertising and the Generalized Second Price Auction (*American Economic Review*, March 2007)

with Michael Ostrovsky and Michael Schwarz

Strategic Bidder Behavior in Sponsored Search Auctions (*Decision Support Systems*, February 2007) with Michael Ostrovsky

On Best-Response Bidding in GSP Auctions (2008)

with Matthew Cary, Aparna Das, Ioannis Giotis, Kurtis Heimerl, Anna Karlin, Claire Mathieu, and Michael Schwarz

Running Out of Numbers? The Impending Scarcity of IPv4 Addresses and What To Do About It (2008)

Adverse Selection in Online "Trust" Certifications (2006) www.benedelman.org/publications/advsel-trust-draft.pdf

Deterring Online Advertising Fraud Through Optimal Payment in Arrears (2008)

Securing Online Advertising: Rustlers and Sheriffs in the New Wild West (2008)

Assessing and Improving the Safety of Internet Search Engines (2006) (published in *The Rising Power of Search Engines on the Internet*)

Earnings and Ratings at Google Answers (2004) cyber.law.harvard.edu/people/edelman/pubs/googleanswers-011404.pdf

Web Sites Sharing IP Addresses: Prevalence and Significance (2003) cyber.law.harvard.edu/people/edelman/ip-sharing

Empirical Analysis of Internet Filtering in China (2002) with Jonathan Zittrain cyber.law.harvard.edu/filtering/china

Published in *IEEE Internet Computing* as "Internet Filtering in China" (March-April 2003)

The Effect of Editorial Discretion Book Promotion on Sales at Amazon.com (2001-2002) benedelman.org/pubs/thesis-intro.pdf

Seymour and Ruth Harris Prize for Best Thesis in Economics, Thomas Temple Hoopes Prize for Undergraduate Research

Microsoft adCenter (Harvard Business School Case 908-049) (2008) with Peter Coles

Opening Dot EU (A and B) (Harvard Business School Case N9-908-052 and N9-908-053) (2008)

Long-Term Research Projects

“Spyware”: Research, Testing, Legislation, and Suits (2002-2008) benedelman.org/spyware

Strategies and Outcomes in Search Engines’ Pay-Per-Click Listings (2004-2008) with Michael Ostrovsky and Michael Schwarz

Resources for Affiliates and Affiliate Merchants (2004-2008) benedelman.org/affiliates

Documentation of Internet Filtering Worldwide (2002-2003) with Jonathan Zittrain cyber.law.harvard.edu/filtering

Localized Google Search Result Exclusions (2002-2003) with Jonathan Zittrain cyber.law.harvard.edu/filtering/google

The Top-Level Domain Evaluation Project (2002-2003) with Jonathan Zittrain cyber.law.harvard.edu/tlds

Classroom and Meeting Technology Tools (1998-2002) cyber.law.harvard.edu/meetingtools

Software Environments for Online Deliberative Discourse (1999-2000) cyber.law.harvard.edu/projects/deliberation

ICANN Public Meeting Archives, Notes, and Briefing Books (1998-2001) cyber.law.harvard.edu/icann cyber.law.harvard.edu/ifwp

Additional Writings

CPA Advertising Fraud: Forced Clicks and Invisible Windows (2008) benedelman.org/news/100708-1.html

Auditing Spyware Advertising Fraud: Wasted Spending at VistaPrint (2008) benedelman.org/news/093008-1.html

PPC Platform Competition and Google's "May Not Copy" Restriction (2008) benedelman.org/news/062708-1.html

Debunking Zango’s “Content Economy” (2008) benedelman.org/news/052808-1.html

TheLadders (Harvard Business School Case 908-061) (2008) with Peter Coles, Brian Hall, and Nicole Bennett

Coupons.com and TRUSTe: Lots of Talk, Too Little Action (2008) benedelman.org/news/031808-1.html

Delaying Payment to Deter Online Advertising Fraud (2008) benedelman.org/paymentdelay

Critiquing C-NetMedia's Anti-Spyware Offerings and Advertising Practices (2008) benedelman.org/news/021408-1.html

Sears Exposes Customer Purchase History in Violation of Its Privacy Policy (2008) benedelman.org/news/010408-1.html

The Sears “Community” Installation of ComScore (2008) benedelman.org/news/010108-1.html

A Closer Look at Coupons.com (2007) benedelman.org/news/082807-1.html

Spyware Still Cheating Merchants and Legitimate Affiliates (2007) benedelman.org/news/052107-1.html

How Spyware-Driven Forced Visits Inflate Web Site Traffic Counts (2007) benedelman.org/news/050707-1.html

Advertising Through Spyware -- After Promising To Stop (2007) benedelman.org/news/031407-1.html

Why I Can Never Agree with Adware and Spyware (2007) technology.guardian.co.uk/online/insideit/story/0,,1997629,00.html

Bad Practices Continue at Zango (2006) with Eric Howes benedelman.org/news/112006-1.html

Intermix Revisited (2006) benedelman.org/news/110806-1.html

Current Ask Toolbar Practices (2006) benedelman.org/spyware/ask-toolbars

False and Deceptive Pay-Per-Click Ads (2006) benedelman.org/ppc-scams

Cookies Detected by Anti-Spyware Programs: The Current Status (2006) www.vinnylingham.com/specialreports/cookie detections

How Vonage Funds Spyware (2006) benedelman.org/news/071806-1.html

Spyware Showing Unrequested Sexually-Explicit Images (2006) benedelman.org/news/062206-1.html

Banner Farms in the Crosshairs (2006) benedelman.org/news/061206-1.html

The Safety of Internet Search Engines (2006) siteadvisor.com/studies/search_safety_may2006 with Hannah Rosenbaum

New York v. Direct Revenue, LLC - Documents and Analysis (2006) benedelman.org/spyware/nyag-dr

The Spyware - Click-Fraud Connection - and Yahoo's Role Revisited (2006) benedelman.org/news/040406-1.html

Advertisers Funding Direct Revenue (2006) benedelman.org/spyware/images/dr-mar06

Critiquing ITSA's Pro-Adware Policy (2006) benedelman.org/news/033106-2.html

Advertisers Funding 180solutions (2006) benedelman.org/spyware/images/180-jan06

Nonconsensual 180 Installations Continue (2006) benedelman.org/news/022006-1.html

Pushing Spyware through Search (2006) benedelman.org/news/012606-1.html

Affiliate Hall of Shame (2006) benedelman.org/news/011606-1.html

180solutions's Misleading Installation Methods - Dollidol.com (2006) benedelman.org/spyware/installations/dollidol-180

Scanning for Solutions (2005) publications.mediapost.com/index.cfm?fuseaction=Articles.san&s=37284

What Claria Doesn't Disclose (Any More) (2005) benedelman.org/news/111505-1.html

Claria Shows Ads Through Exploit-Delivered Popups (2005) benedelman.org/news/101805-1.html

Video: New.net Installed through Security Holes (2005) benedelman.org/news/100505-1.html

How Affiliate Programs Fund Spyware (2005) benedelman.org/news/091405-1.html

How Expedia Funds Spyware (2005) benedelman.org/news/090705-1.html

How Yahoo Funds Spyware (2005) benedelman.org/news/083105-1.html

What Passes for "Consent" at 180solutions (2005) benedelman.org/news/062805-1.html

Google's Role: Syndicated Ads Shown Through Ill-Gotten Third-Party Toolbars (2005) benedelman.org/news/060605-1.html

Ask Jeeves Toolbar Installs via Banner Ads at Kids Sites (2005) benedelman.org/spyware/installations/askjeeves-banner

Hotbar Installs via Banner Ads at Kids Sites (2005) benedelman.org/spyware/installations/kidzpage-hotbar

The 180 Turnaround That Wasn't (2005) adbumb.com/adbumb159.html

The PacerD Installation Bundle (2005) benedelman.org/spyware/installations/pacerd

Claria's Misleading Installation Methods - Ezone.com (2005) benedelman.org/spyware/installations/ezone-claria

Claria's Misleading Installation Methods - Dope Wars (2005) benedelman.org/spyware/installations/dopewars-claria

180solutions's Misleading Installation Methods - Ezone.com (2005) benedelman.org/spyware/installations/ezone-180

3D Desktop's Misleading Installation Methods (2005) benedelman.org/spyware/installations/3d-screensaver

Comparison of Unwanted Software Installed by P2P Programs (2005) benedelman.org/spyware/p2p

Advertisers Supporting eXact Advertising (2005) benedelman.org/spyware/exact-advertisers

How Google's Blogspot Helps Spread Unwanted Software (2005) benedelman.org/news/022205-1.html

How VeriSign Could Stop Drive-By Downloads (2005) benedelman.org/news/020305-1.html

Intermediaries' Role in the Spyware Mess (2005) benedelman.org/news/052305-1.html

Media Files that Spread Spyware (2005) benedelman.org/news/010205-1.html

Video: Ebates Installed through Security Holes (2004) benedelman.org/news/121504-1.html

Direct Revenue Deletes Competitors from Users' Disks (2004) benedelman.org/news/120704-1.html

Who Profits from Security Holes? (2004) benedelman.org/news/111804-1.html

Gator's EULA Gone Bad (2004) benedelman.org/news/112904-1.html

Grokster and Claria Take Licenses to New Lows, and Congress Lets Them Do It (2004) benedelman.org/news/100904-1.html

California's Toothless Spyware Law (2004) benedelman.org/news/092904-1.html

The Effect of 180solutions on Affiliate Commissions and Merchants (2004) benedelman.org/spyware/180-affiliates

WhenU Spams Google, Breaks Google "No Cloaking" Rules (2004) benedelman.org/spyware/whenu-spam

WhenU Copies 26+ Articles from 20+ News Sites (2004) benedelman.org/spyware/whenu-copy

Advertisers Using WhenU (2004) benedelman.org/spyware/whenu-advertisers

WhenU Security Hole Allows Execution of Arbitrary Software (2004) benedelman.org/spyware/whenu-security

WhenU Violates Own Privacy Policy (2004) benedelman.org/spyware/whenu-privacy

Methods and Effects of Spyware (FTC Comments) (2004) benedelman.org/spyware/ftc-031904.pdf

A Close Reading of Utah's Spyware Control Act (2004) benedelman.org/spyware/utah-mar04

Web Sites Sharing IP Addresses: Prevalence and Significance (2003) cyber.law.harvard.edu/people/edelman/ip-sharing

Documentation of Gator Advertisements and Targeting (2003) cyber.law.harvard.edu/people/edelman/ads/gator

Empirical Analysis of Google SafeSearch (2003) cyber.law.harvard.edu/people/edelman/google-safesearch

Large-Scale Registration of Domains with Typographical Errors (2003) cyber.law.harvard.edu/people/edelman/typo-domains

Technical Responses to Unilateral Internet Authority: The Deployment of VeriSign "Site Finder" and ISP Response (2003) with Jonathan Zittrain cyber.law.harvard.edu/tlds/sitefinder

Compliance with UDRP Decisions: A Case Study of Joker.com (2003) cyber.law.harvard.edu/people/edelman/udrp-compliance

Blocked Sites will Return, but with Limited Access (2003) South China Morning Post, op-ed

Domain Name Typosquatter Still Generating Millions (2003) circleid.com/article/101_0_1_0_C

Documentation of Internet Filtering in Saudi Arabia (2002) with Jonathan Zittrain cyber.law.harvard.edu/filtering/saudiarabia

Localized Google Search Result Exclusions (2002) with Jonathan Zittrain cyber.law.harvard.edu/filtering/filtering/google

Analysis of Domain Reregistrations Used for Distribution of Sexually-Explicit Content (2002) cyber.law.harvard.edu/people/edelman/renewals

Large-Scale Intentional Invalid WHOIS Data (2002) cyber.law.harvard.edu/people/edelman/invalid-whois

.NAME Registrations Not Conforming to .NAME Registration Restrictions (2002) cyber.law.harvard.edu/people/edelman/name-restrictions

Alternative Perspectives on Registrar Market Share (2002) cyber.law.harvard.edu/people/edelman/registrar-choice

DNS as a Search Engine: A Quantitative Evaluation (2002) cyber.law.harvard.edu/people/edelman/dns-as-search

Disputed Registrations in .BIZ (2002) cyber.law.harvard.edu/people/edelman/biz-sunrise

TLD Registration Enforcement: A Call for Automation (2002) circleid.com/article/66_0_1_0_C circleid.com/article/72_0_1_0_C

Invalid WHOIS Data: Who Is Responsible? (2002) circleid.com/article/79_0_1_0_C

When the Net Goes Dark and Silent (2002) [South China Morning Post](#), op-ed

Defensive Registrations: Why They're Still Needed, and How to Make Them Earn Their Keep (2002)
[Verisign Digital Brand Management Digital Branding Bulletin](http://www.verisign.com/services/cdns/news/columnist_200212.html), www.verisign.com/services/cdns/news/columnist_200212.html

iCravetv.biz/Entervision Retransmits CNN, Cartoon Network, PAX TV, California NBC Affiliate (2002)
cyber.law.harvard.edu/people/edelman/icrave

Analysis of Registrations in Alternative Root TLDs (2001) cyber.law.harvard.edu/people/edelman/dotbiz and [/people/edelman/dotweb](http://people/edelman/dotweb)

Documentation of Privacy and Security Shortcomings at Buy.com (2000) cyber.law.harvard.edu/people/edelman/buy-privacy.html

Understanding and Critiquing ICANN's Policy Agenda (2000) cyber.law.harvard.edu/icann/pressingissues2000/briefingbook

Executive Summaries of Formative ICANN Documents (1999)
cyber.law.harvard.edu/pressbriefings/icann/briefingbook/executivesummaries.html

ICANN and the Public Interest: Pressing Issues (1999) cyber.law.harvard.edu/icann/workshops/1a/briefingbook

Using Trumpet Winsock on Netcom Netcruiser Accounts (1995) cyber.law.harvard.edu/people/edelman/trumpet.html

Programming Experience

Microsoft Visual Basic (14+ years experience), VB.NET

Mathworks MatLab

Stata

SPlus / R

Python

PHP

Awards

Harvard University Graduate Economics Fellowship (2003-2006)

John M. Olin Fellowship in Law and Economics (2003-2004, 2004-2005)

Hoopes Prize for Undergraduate Research (2002)

Seymour and Ruth Harris Prize for Best Honors Thesis in Economics (2002)

John Harvard Scholarship, Harvard College (1998-1999, 1999-2000, 2000-2001)

Rank I Honors, Harvard College (1998-1999, 1999-2000, 2000-2001)

Phi Beta Kappa, Harvard College (2001)

Undergraduate Honors Research Scholarship, Department of Economics, Harvard College (2001)

Detur Prize, Harvard College (1999)

Expert Testimony

US House of Representatives, Committee on the Judiciary (2008) (invited / hearing cancelled)

US Senate, Committee on Commerce, Science, and Transportation (2008)

District Court, Third Judicial District of Utah (2004)

US Federal Court, Eastern District of Michigan (2003)

US House of Representatives, Committee on the Judiciary (2003)

US Federal Court, Eastern District of Pennsylvania (2002)

US Federal Court, Western District of Pennsylvania (2000)

Academic Service

Associate Editor: *Journal of Economic Perspectives* (2008)

Referee: *American Economic Review*, *Journal of Applied Economics*, *RAND Journal of Economics*, *Management Science*, Sponsored Search Workshop, Workshop on the Economics of Information Security, Workshop on the Economics of Securing the Information Infrastructure

Program committee: Workshop on the Economics of Securing the Information Infrastructure (2006), Sponsored Search Workshop (2007), WWW2008, Fourth Workshop on Ad Auctions (2008)

Non-resident tutor / senior common room member, Cabot House – academic and thesis advising (2004-2008)