

David Scott Howell

Inventor • Designer • Entrepreneur • Developer • Expert Witness

Digital inventor and designer who has successfully monetized emerging technology for 25+ years. I advise and lead high-performing teams to create, extend, and leverage their assets to solve real problems elegantly, capture new value, and delight millions of paying customers.

CREDENTIALS

Cornell University, The Johnson School

MBA

Case Western Reserve University

BS, Computer Science and Engineering with High Honors

BA, Music with High Honors

MS, Computer Engineering (coursework complete, thesis incomplete)

National Merit Scholarship, Tau Beta Pi, Phi Beta Kappa, Mortar Board, Phi Mu Alpha Sinfonia.

Speaker: Apple WWDC, National Association of Broadcasters, One More Thing Melbourne, CocoaHeads, Voices that Matter Philadelphia, OEN Pub Talks, OEN CEO Panel, Mosaic Vail Summit, Data Management Association, Innovations Mobile, REAP, Portland Mac Users Group, Clark County PubTalks, Mobile Portland, AltWWDC

Guest Lecturer: Portland State University Graduate School of Engineering Management, University of Phoenix

PATENTS

U.S. provisional: Accelerated secondary display system

U.S. #10,163,422: Accelerated secondary display system

U.S. #9,058,759: Virtual display device drivers compatible with Windows display driver model

U.S. #7,643,037: Method and apparatus for titling by applying effects to computer-generated characters

U.S. #7,594,180: Method and apparatus for titling by presenting computer-generated characters

U.S. #7,199,805: Method and apparatus for titling

U.S. #8,694,888: Method and apparatus for titling

U.S. #7,483,041: Method and apparatus for titling

EXPERIENCE

Avatron

Founder & CEO, 2008–present

Bootstrapped startup, funded entirely by app sales, developing innovative hardware and apps for iOS, Android, macOS, and Windows. Led a world-class team of 18 engineers and designers to support and sell \$14M of apps to 2.5M customers, fueled by a culture of solving the harder problems, love of design elegance, geeky camaraderie, and a fierce respect for customers' time and productivity. Growing via traditional and guerrilla channel strategies.

PRODUCTS

- Air Sharing: document management and remote file access app. Apple's first App of the Week and #1 top-downloaded iOS app, was installed on 20% of all iPhones after a million downloads in its first 2 weeks. \$4M+ sales over 5 years.
- Air Display: patented app that turns an iPad, Android tablet, Mac, or PC into an extra display for a host computer. #2 top-grossing iOS Utility app. \$9M+ sales over 7 years.
- True Display: patented hardware adapter that turns a tablet into a Mac/PC monitor.
- Air Connect: tunnels to remote Mac for screen sharing or file sharing. Launched on Kickstarter.
- Air Dictate: enabled voice dictation on a Mac via an iPhone mic, before Apple launched Siri for Mac.
- Print Sharing: prints documents to shared printers, using an embedded CUPS client.
- Avatron Publishing: 50+ apps built with licensed media.

Negotiated and performed engineering contracts. Clients included Samsung and Intel.

Perfect Company

Vice President of Engineering, 2019–present

Leading a world-class team of app and data engineers to reinvent the commercial kitchen.

Our projects include:

- Perfect Bake and Perfect Drink: Patented consumer apps that control a connected digital scale, for precise baking and cocktail mixing
- NutriBullet: An app that controls a patented connected blender, available from CostCo
- AIM: An advanced ingredient management system to forecast ingredient preparation requirements and guide kitchen staff through recipe completion, including control of connected appliances
- PUC: An app, a web API for point-of-sale integration, and a connected cabinet of lockers for secure food delivery

Apple

Senior Engineering Manager, Applications, 2002–2008

Tech giant focused on transforming the mundane into something delightful

Managed the FxPlug plug-in architecture for visual effects in professional film & video production apps.

- Developed and documented the FxPlug framework and SDK.
- Supported third-party and internal FxPlug developers. Hosted developer kitchens.
- Guided internal Apple teams to integrate FxPlug, Core Image, and After Effects plug-in support into Pro Apps suite, including Final Cut Pro and Motion.

Managed and led the LiveType engineering team.

- Led engineering team to turn my India Pro animated-fonts technology into an Apple app.
- Coordinated the human and visual interface teams with engineering to refine user experience.
- Invented and implemented support for animated vector-based LiveFonts.
- Worked with Apple Legal to patent LiveFonts, LiveType, and LiveType Effects titling technology.

Contributed to engineering on Final Cut Pro, Motion, LiveType, Keynote, Pages, iWeb, Numbers, and Aperture.

Pablo Media

Founder & Principal Engineer, 1994–2002

Boutique software engineering firm with 20+ clients, specializing in making games and tools for creative users

Negotiated 30+ software development contracts. Led a network of engineers to fulfill the contracts, while building a platform for media-creation and image-processing apps. Acquired by Apple in 2002.

SELECTED CLIENTS

Prismo Graphics: Co-designed and wrote India Pro Special Effects Titler (predecessor of Apple's LiveType), an animated titling app for film and video, with animated fonts, scripted special effects, live video preview, and movie compositing. Helped prepare for Apple acquisition. Wrote all code for macOS and Windows.

Sarnoff Corporation: Developed VideoBrush Panorama, a macOS app that seamlessly tiled panoramic images from live video capture, using advanced pixel-flow algorithms.

Lucasfilm, Iomega, Videonics, Xaos Tools, DigiEffects, Burnett Group, Stomper, AVerMedia, PicoStar: Developed serial and USB drivers, image-processing plug-ins and components for QuickTime, Director, Photoshop, and After Effects. Designed and developed video capture, playback, and editing tools.

Hasbro, Zombie, Westwood Studios, Realtime Associates: Ported games to macOS and Sony Playstation. Titles: Candy Land Adventure, Tonka Construction Site, Locus, Young Blood, and Legends of Kyrandia.

Sonus, Passport Designs, Digitalk, New Video, MetaCreations

Lead Software Engineer roles, 1987–1994

Developed tools for composers, video producers, and developers, on the bleeding edge of digital technology.

- Led a software engineering team at the first joint venture funded by Apple and Intel, to create the EyeQ hardware and software for full-screen 30-fps video playback, before Apple launched QuickTime.
- Ported Intel's Indeo video codec to macOS, under contract to Intel.
- Wrote music composition apps for macOS and Apple IIgs when MIDI was exciting and new, and received Electronic Musician's Most Innovative Software Product award for Master Tracks Pro 4.
- Led macOS engineering for the Smalltalk/V Mac development environment.

AVOCATIONS

Expert Witness

Assisting legal teams with software patent infringement and invalidity litigation. Researching prosecution history, analyzing prior art, preparing claim constructions, testifying in federal court, writing expert opinions.

Licensed Real Estate Broker, Oregon First, Realtors®

Advisory Board Member, Swag'r Digital Media

Advisory Board Member, Bizmati

Board Member, Chair of Entrepreneur Services committee, Oregon Entrepreneurs Network (2 years)

Board Secretary and Co-founder, Jazz Society of Santa Cruz County (4 years)

Helped achieve non-profit 501(c)(3) status, performed as house pianist for a weekly jam session.

Jazz Pianist, various quartets, trios, big bands