

# David Scott Howell

**Inventor • Designer • Entrepreneur • Developer**

A digital inventor with 30+ years of monitoring, anticipating, and integrating emerging technologies and design trends, I lead high-performing teams to solve real problems elegantly, to delight millions of paying users, and to monetize for profitable growth. New technology is my oxygen.

## **EXPERIENCE**

### **Avatron**

#### **Founder & CEO, 2008–present**

Founded a bootstrap-financed startup that produces innovative hardware and software products for iOS, Android, macOS, and Windows. Applied my own engineering strategy to grow a world-class team to 18 full-time employees plus contractors, funded solely by app sales. Conceived app ideas at the edge of possible and led design and engineering to bring those ideas to life. Launched marketing campaigns through traditional and guerrilla channels to sell \$13M of apps. Seeded and nurtured a corporate culture around solving the harder problems, love of design elegance, geeky camaraderie, and fierce respect for users' time and productivity.

#### **HIT APPS**

- Air Sharing: a document management and remote file access. Apple's first App of the Week, was once on 20% of all iPhones after a million downloads in its first two weeks.
- Air Display: turns an iPad, Android tablet, Mac, or PC into an extra display for another computer. #2 top-grossing iOS Utility app from 2010 to 2015.
- Air Connect: tunnels to remote computers to do screen sharing, file sharing, or command-line access.
- Air Login: lets you control your Macs remotely from an iOS screen. Launched with a Kickstarter project.
- Air Dictate: enables voice dictation on a Mac by talking into an iPhone.
- Print Sharing: prints documents to shared printers, using an embedded CUPS client, before AirPrint.
- Avatron Publishing: 50+ apps built around high-quality media licensed from partners.

Spoke as lecturer, industry expert, and panelist on a broad range of app development and marketing topics.

### **Codex Digital**

#### **Consulting Software Engineer, 2017**

Wrote color correction software for the world's leading producer of color correction and color grading technology for the film industry.

### **Apple**

#### **Senior Engineering Manager, Applications, 2002–2008**

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

- Developed and documented the FxPlug framework and SDK.
- Presented basic and advanced FxPlug sessions at NAB, WWDC (2005, 2006, 2007), and CocoaHeads
- Supported third-party and internal FxPlug developers.
- Guided internal Apple teams to integrate FxPlug, Core Image, and After Effects plug-in support into Final Cut Pro, Motion, and other Apple Pro Apps.

Managed 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 of Final Cut Pro, Motion, Keynote, Pages, iWeb, Numbers, Aperture, and other apps.

## **Pablo Media**

**Founder & Principal Engineer**, 1994–2002

Negotiated 30+ software development contracts. Led a network of engineers to fulfill the contracts, while building a cross-platform app platform for apps focused on media creation and image processing. Sold that intellectual property to Apple in 2002 when Apple acquired Pablo Media's last client, Prismo Graphics.

### SELECTED CLIENTS

Prismo Graphics: Wrote India Pro Special Effects Titler (predecessor of Apple's LiveType), a pro animated titling app for film and video, featuring animated fonts, scripted special effects, real-time video preview, and movie compositing, for macOS and Windows. Helped Prismo sell India Pro to Apple M&A.

Sarnoff Corporation: Developed VideoBrush Panorama, a macOS app for seamless tiling panoramic images from live video capture, using a licensed pixel-flow library from an awe-inspiring team of big-brained PhDs.

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 and game engines to macOS and Sony Playstation. Titles included Candy Land Adventure, Tonka Construction Site, Locus, Young Blood, and Legends of Kyrandia.

**New Video, MetaCreations, Passport Designs, Digitalk**  
**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.
- Ported the 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.

## **PATENTS**

us 15/902,779: Accelerated secondary display system. (pending)

us 9,058,759: Virtual display device drivers compatible with Windows display driver model.

us 8,694,888: Method and apparatus for titling.

us 7,643,037: Method and apparatus for titling by applying effects to a number of computer-generated characters.

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

us 7,483,041: Method and apparatus for titling.

us 7,199,805: Method and apparatus for titling.

## **NONPROFITS**

### **Oregon Entrepreneurs Network, 2013–2014**

Member of board of directors, chair of Entrepreneur Services committee.

### **Jazz Society of Santa Cruz County, 2000–2004**

Co-founded a nonprofit to promote jazz music. Served as secretary on board of directors, contributed to the website, helped achieve non-profit 501(c)(3) status, and performed as house pianist for a weekly jam session.

## **EDUCATION**

### **Cornell University, The Johnson School**

#### **MBA**

### **Case Western Reserve University**

**BS**, Computer Engineering with High Honors, GPA 3.74.

**BA**, Music with High Honors, GPA 3.74.

**MS**, Computer Engineering (thesis and degree incomplete), coursework only.

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