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Portfolio and Demo Reels: http://www.duanecash.com
ThynkWare: http://duanecash.com/thynkware/index.html
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Patents Pending:
Honda R&D – 5 Patents Filed (Awaiting Award). 15+ others in various stages of filing/application process since Jan 2013
Visa Innovation Lab – 19+ patent applications filing currently for innovations related to the core technology
USAA - Several patent applications filing for innovations related to blockchain and core insurance technology

Patent Grants:
Inventor/Assignee - Mind-Controlled Virtual Assistant on a Smartphone Device (file May 2013) granted on July 18, 2018
Patent for Peer forward authorization of digital requests (Pat. No. 11170379) granted on November 9, 2021
Patent for Authentication-activated augmented reality display device (Pat. No. 10706136) granted on July 7, 2020
Patent for Validation identity tokens for transactions (Pat. No. 11176554) granted on November 16, 2021
Patent for Interactive Vehicle Gaming System and Method (Pat. No. 8939839) granted on January 27, 2015
Patent for Touch-based System for Controlling an Automotive Steering Wheel (Pat. No. 9067618) - June 30, 2015
Patent for Method and System of Virtual Gaming in a Vehicle (Pat. No. 9101824) granted on August 11, 2015

Certification:
Scrum Master - Accredited Certification from the International Scrum Institute (Authorized Certification ID: 86312155367340) on November 30, 2016 - Exam Score of 98%.

Technical Skills and Tools:
iOS/iPhone OSX/Cocoa/Objective-C/Swift/Xcode, jQuery, HTML5/CSS3/Javascript, MongoDB, Express, AngularJS, NodeJS, React, QT/QML, QNX, Corona SDK, Lua, Android SDK, Eclipse, JAVA, Pocket PC/ Windows Mobile Smart Device programming, Visual Studio, SQL Server, Java, C/C++, C#, Unity Game Development, GIT, MS Access Database, Excel, NetBeans 6.1, Eclipse, Quick Test Pro/Quality Center, .NET 3.5 framework, UnReal Editor 3.0, UDK, Crystal Reports 2008 and Crystal Reports in Visual Studio 2008, Flash/Flex, XML, XMLSpy, PHP, Unix, VMS, SQL, SQL Server Management Studio, Photoshop, MS Project, MS Visio, CVS, Microsoft Office tools, TeamTrack/Mashups, Maya.

iPhone development experience:
- Developed ThynkWare Speech - a mind-enabled app to powered by thoughts: (video at: https://www.youtube.com/watch?v=cBxSvuJZqYg)
- Developed ThynkBot - a mind-enabled robot powered by thoughts: (video at https://www.youtube.com/watch?v=g6w4CGWHGoI)
- Developed MindGear – A Mind-controlled System for Deeper Cognitive Connection with Virtual Assistants: (video at https://vimeo.com/62224663)
- Developed and deployed "Dawn – A New Kind of Virtual Assistant" iOS app to the App Store: (https://www.youtube.com/watch?v=KHC51LYCCss).
- Developed and deployed "Santa Tap Mania" iOS app to the App Store
- Developed and deployed "Swervy Car" iOS app to the App Store
- Developed and deployed "Cool Tweets" iPhone app to the App Store
- Developed with iPhone SDK using XCode, Interface Builder and Objective-C
- Developed and deployed "Pennies from Heaven" iPhone / iPad game to the App Store
- Licensed and registered iPhone Developer in the Apple iPhone Developer Program
- Experience with the entire iPhone App submission process from concept to App Store
- Developed iPhone and iPad apps with iPhone SDK using XCode/Cocoa, Interface Builder and Objective-C
- Developed custom Siri API for 3rd party apps
- Experience with Voice recognition and text-to-speech synthesis APIs
- Experience with VGA and AV out from iPhone to external touchscreens and monitors
- Experience in the creation of advanced iPhone music applications for automobile integration

Game and ActionScript development experience:
- Developed and released "Pennies from Heaven" Flash/Action Script 3.0 game on Kongregate.com with score APIs.
- Developed and released "Burger Buster" CS4 Flash game in ActionScript 3 for Kongregate.com and the Facebook social networking site
- Developed and released "JUNODI Soccer" Flash/ActionScript game at junodi.com
- Developed and released "Tic-Tac-Toe" Flash/ActionScript game for papertoys.com
- Developed and released "SuDoku Champ" game in C# for Windows Mobile devices through Handango.com
- Developed and released "Briefcase Deal" game in C# for Windows Mobile devices through Handango.com
- Developed R2-D2 Voice Interactive speech recognition program in C#/Visual Studio and XNA Game Studio
- Modeled spaceships, vehicles, static meshes and characters in Maya, 3DS Max, and Mudbox
- Created Unreal Tournament levels and maps under Unreal Editor 1.0, Unreal Editor 3.0, and UDK
- QA tested Crime Patrol 2, Battles in Time, Orbatak, and Mad Dog McCree for American Laser Games
- Developed Wobbly World game (shareware) in C++ for Mac using CodeWarrior

Professional Experience

SiriusXM via Hays contract, Irving, Texas
October 2017 to Present
iOS Developer (Lead) / Part ScrumMaster, UX Design/Architecture

Responsibilities:
- Worked on NissanConnect Services iOS app for connect cars
- Developed and maintained features in native Objective-C, Swift and SwiftUI in Xcode
- Developed large-scale telematics mobile apps for the smartphone and Apple Watch
- Worked in an Agile environment using JIRA to manage stories and issues
- Used GIT and Bitbucket for repository management
- Collaborated with team members through Zoom and Slack remotely
- Worked closely with client and team through refinement of story solutions
- Provided UX support for visual assets with graphic design tools such as Affinity Designer
- Provided Agile support as an interim ScrumMaster for the team
- Led the iOS mobile team as necessary to align mobile decisions with project goals

ThynkWare Innovation, Inc., McKinney, Texas (www.thynkware.com)
April 2016 to January 2022
Founder/CEO – Multimedia Developer / Innovator / Chief Technical Project Manager

Responsibilities:
- Working on a mind-controlled interface to control any device with the mind
- Created Unity 3D prototypes in C# for 2D/3D brainwaves computer interfaces
- Created iOS prototypes that control the iPhone and various functions using brainwave recognition
- Developing ThynkWare Speech to help those with ALS and locked-in syndrome to speak using thoughts
- Developing ThynkBot to control robots through brainwave patterns
- Created thynkware.com with HTML5/CSS3/JavaScript/JQuery as a media an business outlet
- Worked with Maya 3D and Blender for 3D modeling
- Created multimedia graphical assets in Adobe Photoshop and Affinity Designer
- Created demo videos using After Effects and iMovie
- Worked with Objective-C and Xcode and other APIs for developing applications
- Worked with QT/QML from QNX for iOT interfaces
- Worked with Node.js, Python, MongoDB, AngularJS, and Express for applications.
- Individual inventor for Patent Pending on a Mind-Controlled Virtual Assistant on a Smartphone Device
- Experienced in writing term sheets and preparing executive summaries / business plans for investors
- Experienced with incorporating and running a C-Corp from the ground up
- Comfortable speaking with legal attorneys, investors, business bankers and external hardware manufacturers
- Demonstrates initiative by affecting change through strategic planning and careful decision-making

CBRE via Insight Global, contract, Dallas, Texas
August 2017 to October 2017
Full Stack Software Engineer

Responsibilities:
- Worked on React Native software applications
- Developed using Xcode for iOS platform
- Developed using Android Studio for Android platform
- Worked on backend development using Kinvey BaaS platform
- Integrated MS Graph/Office 365 APIs into software booking application
- Utilized Aruba Network beacons and implemented sensor service objects
- Worked with JIRA for Scrum planning and project tracking
- Used Git for repository and version control
- Used Sketch and Invision prototyping software for digital wireframes and design

AT&T via Insight Global contract, Richardson, Texas
January 2017 to July 2017
iOS, VR and AR Multimedia Developer

Responsibilities:
- Worked on Unity 3D in C# for virtual reality and augmented reality projects
- Worked on 3D/2D Multimedia experiences
- Worked with Maya and 3D modeling tools for assets
- Worked on projection mapping and mixed reality experiences
- Worked on development on 3d environments with Hololens
- Worked on native iOS/Swift applications for emotion sensing projects
- Worked with Code Cloud and SourceTree
- Worked with JavaScript applications, web technologies and RESTful apis
- Worked with Adobe Photoshop, Illustrator, After Effects and Affinity Designer for graphics
- Worked with augmented reality, virtual reality and other emerging technologies
- Worked with computer vision technology for face feature detection
- Worked in an Agile/Scrum methodologies
- Participated in ATO conference presentations
- Proof-of-Concept creation for R&D labs
- Worked with Internet of Things Platforms
- Exposed to Google Home and Alexa virtual assistant technologies

American Airlines via Swift Pace Solutions contract, Fort Worth, Texas
August 2016 to November 2016
iOS Engineer in Innovation Group

Responsibilities:
- Worked on native iOS/Swift applications for next-gen airline software
- Worked with JavaScript applications and web technologies
- Worked with RESTful apis
- Worked with bluetooth technology for scanner connectivity
- Worked with computer vision libraries for passport and barcode scanning capabilities

USAA via Millenium Group consultant contract, Plano, Texas
November 2015 to March 2016
Software Developer and Integrator

Responsibilities:
- Working on native mobile applications with the Mobile Infrastructure Team
- Developing in Objective-C, Swift, and other technologies
- Working on new capabilities with emerging technologies
- Collaborating with multiple groups in an agile environment

- Worked with REACT.js, Webpack server for new web projects
- Worked with JAVA on software capabilities and packages
- Worked with Adobe Photoshop, Illustrator and Affinity Designer for graphic assets
- Worked with MongoDB, Express, AngularJS, and Node.js for MEAN stack solutions

ThynkWare Innovation, Inc., Mountain View, California (www.thynkware.com)
January 2013 to December 2015
Founder/CEO – Multimedia Developer / Innovator / Chief Technical Project Manager

Responsibilities:
- Working on a mind-controlled interface to control any device with the mind
- Created iOS prototypes that control the iPhone and various functions using brainwave recognition
- Developing ThynkWare Speech to help those with ALS and locked-in syndrome to speak using thoughts
- Developing ThynkBot to control robots through brainwave patterns
- Worked with Maya 3D and Blender for 3D modeling
- Created thynkware.com with HTML5/CSS3/JavaScript/JQuery as a media an business outlet
- Worked with Objective-C and Xcode and other APIs for developing applications
- Worked with QT/QML from QNX for iOT interfaces
- Worked with Node.js, python, MongoDB, AngularJS, and Express for applications.
- Individual inventor for Patent Pending on a Mind-Controlled Virtual Assistant on a Smartphone Device
- Experienced in writing term sheets and preparing executive summaries / business plans for investors
- Experienced with incorporating and running a C-Corp from the ground up
- Comfortable speaking with legal attorneys, investors, business bankers and external hardware manufacturers
- Demonstrates initiative by affecting change through strategic planning and careful decision-making

Visa, San Francisco, California
(Intelliswift August 2013 to February 2014), then Visa FTE February 2014 to May 2015
Multimedia Developer/Researcher/Innovator - Staff Software Engineer

Responsibilities:
- Contributed to company Intellectual Property with 19+ patents filing
- Working on iOS and mobile projects using Xcode for innovative experiences
- Working with metaio SDK on augmented reality projects
- Working with Maya 2015, creating 3D model assets for Unity and Metaio UX
- Working with Unity3D (C# and UnityScript) for immersive experiences
- Working on projection mapping projects using Resolume Arena mapping software
- Developing personal area networks using iBeacon and Bluetooth Low Energy networks
- Worked with WebSockets, Socket IO, Client/Server APIs, and Open Sound Control for integration
- Developing visuals and visual programming language for new technology tools
- Working with HTML5/CSS3/Javascript/jQuery and Node.js for rapid prototyping projects
- Gaining experience in Vagrant virtual machines with Laravel LAMP stacks and HADOOP
- Worked with LAMP full stack development using Apache, MySQL, Python, Flask and Bottle frameworks
- Participated in scrum meetings in an iterative agile development environment
- Worked in energetic rapid prototyping environment with evolving requirements
- Worked with Adobe Photoshop, Illustrator to create visual design elements for web software and website projects
- Collaborated with top engineers to deliver innovative solutions for products

Honda R&D Americas (Information Technology Research) contract via Aerotek, Mountain View, California
June 2011 to July 2013
Tech Specialist, iOS

Responsibilities:
- Developing iPhone/iPad apps and HTML5 web apps for integration with future automobile platforms
- Created the first prototype leading to Siri Eyes Free, iOS in the Car that later became Apple CarPlay
- Developed applications for turn-by-turn and pedestrian navigation with voice guidance for iOS6
- Created custom APIs to find POI anywhere for mapping applications for use in iPhone apps
- Worked with WebSockets, TCP Socket Tunnels and Cllient/Server API for in-vehicle solutions
- Working with Objective-C and Xcode for iOS to develop applications for in-vehicle infotainment and telematics
- Designed architecture of apps that utilize cloud-based voice recognition and text-to-speech

- Architected mobile prototypes/apps that output to and receive touch events from in-vehicle touchscreens
- Development of mobile prototypes that create innovative in-vehicle social networking experiences
- Development with HTML5/CSS3/Javascript, and jQuery mobile to deploy on multiple platforms
- Worked with GPS location, heading, accelerometer, Bluetooth, and iPod Out technologies on mobile devices
- Worked with Dreamweaver CS5.5, NodeJS, NimbleKit, PhoneGap and Apache services for HTML5 solutions
- Large Project Leader for iOS application in-vehicle projects from concept to transfer of projects to production
- 5 Patents Pending and 15+ others in various stages of filing/application process since Jan 2013

Toyota (Intelligent Computing Group) contract via Artizen, Inc, Mountain View, California
November 2010 to June 2011
iPhone Architect

Responsibilities:
- Developed innovative iPhone applications for integration with the automobile
- Working in a research group with some of the top engineers
- Working with Objective-C and Xcode for iOS, Qt/QML with C++, QNX and Ubuntu Linux platforms
- Integrated iPhone app with steering wheel controls and in-vehicle touchscreen
- Working on iPhone apps that use GPS location and heading, accelerometer, mail composer services, Bluetooth, and other tracking in background mode
- Worked with Android SDK in Eclipse on application for the vehicle

Mitchell International, Inc, Albuquerque, New Mexico
July 2007 to Feb 2010
Software Engineer/iPhone Developer

Responsibilities:
- Worked on enterprise software using Visual Studio in C#/NET, VB6, ASP.NET and SQL server
- Worked with an enterprise Client/Server architecture for application development
- Worked with Microsoft Project to track, analyze and communicate development schedules and milestones
- Experience with software development life cycle in an Agile development environment
- Experience with working on complex projects while leveraging challenges of resources, time, budget and scope
- Created custom QA Automation in Quick Test Pro using VBScript and logged with TeamTrack/Mashups
- Produced technical documentation, test cases, and test plans for QA, marketing and technical support
- Participated in black box, white box, alpha, regression and verification testing as a QA Engineer
- Trained by Microsoft Technical Partner in WPF, Expression Blend and Silverlight during 5-hour seminar
- Worked on some Expression Blend and Silverlight code binding for software prototypes
- Wrote a 362-page Report Pak technical manual for ABS Enterprise during two month period
- Worked on game development in Unreal Editor 3.0, Maya, Mudbox, 3DS Max, Actionscript 3.0, iPhone SDK, Objective-C, Xcode/Cocoa, Windows Mobile, C#/.NET 3.5, C++ and XNA Game Studio during off hours

Red Mountain Media, Albuquerque, New Mexico
February 2006 to June 2007
Web Architect / HTML Author

Responsibilities:
- Worked with CVS, XML, HTML, Microsoft Office (Word and Excel), SQL server, and XMLSpy
- Created HTML and XML User Interface content for online course website and participated in QA verifications
- Worked on Windows Mobile and game development in C#, C++, Java and Actionscript during off hours

Sunshine Communications, Albuquerque, New Mexico
August 2005 to February 2006
High-Speed Internet Installation Technician

Responsibilities:
- Installed and high-speed Internet service using my experience in LAN configuration, Ethernet, TCP-IP Protocol
- Performed successful aerial and underground installation, post-wiring, and network configurations resulting in excellent customer satisfaction for the custom cable installations
- Worked on game development in Flash/Actionscript and Visual C#/Visual Basic during off hours

Cash Art Studio, Albuquerque, New Mexico
January 2003 to August 2005

Web Developer / 2D Artist

Responsibilities:
- Worked with Dreamweaver, HTML, XML, Flash/Actionscript, All-In-One Submission for SEO and marketing, MS Word, MS Excel, Real-Draw, Photoshop, Illustrator, and MS FrontPage
- Developed web ads, websites, and press release for products
- Drove the Internet marketing of original acrylic and oil paintings, resulting in over 2000 sales over 3 years
- Designed User Interface for business website in Dreamweaver and HTML

Di Lai Graphics, Irving, Texas
January 2001 to June 2002
Web, Logo, Flash Actionscript Developer / Web Architect

Responsibilities:
- Worked with Flash/Actionscript, HTML, XML, Director, Photoshop/Illustrator, Java, JavaScript, C/C++, and Real-Draw
- Designed and implemented websites, User Interfaces, multimedia Flash video, graphics and logos for clients including the Beck Group, Bryte Software, JUNODI LLC, Three Dog Bakery, and Green Phoenix Productions

Education:
- M.A., Interactive Design/Game Development, SCAD   Savannah, Georgia   2014
- B.S., Information Technology (MIS), National American University   Albuquerque, New Mexico   2008
- B.A., English – Creative Writing, University of New Mexico   Albuquerque, New Mexico   1994
- Graphic Design coursework, Westwood Institute of Technology   Euless, Texas