# **Andrew Cook**

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## **Skills**

**Mastery of:** C# in ASP.NET MVC, ASP.NET Web Forms, Umbraco, WPF; Python; Java (pre-8); VB.NET; HTML, CSS, LESS, JavaScript **Familiar with:** C# in Xamarin, Store Apps, Unity; Java (8+); Lua; C++; ActionScript

# **Professional Experience**

**WillowTree, Inc** *Client names are omitted per NDA.* 

Platform Software Engineer

November 2021 - May 2023

- Development and PCI compliance of online payments for an ASP.NET-backed mobile app ("Bobcat")
- Refactoring and hardening of a cloud spend analytics platform in Snowflake ("Slingshot")
- Development, security, and PCI compliance of a fast path for online payments at bank-branded booking sites ("Doubloon")

#### **Interface Media Group**

Digital Media Software Developer

February 2014 – June 2019

- Development, maintenance, and support for 25 online account management websites for parking companies with secure online payment, including analysis and upgrades for redesigns, PCI compliance, accessibility, responsiveness, and analytics
- Development, maintenance, and support for several museum interactive displays
  - National Museum of American History: Creating Icons
  - Defense Intelligence Agency: Heritage Theatre, Secret Victories, NCMI: Measuring Disaster, Operation Urgent Rescue, Hiding in Plain Sight, an interactive selector, and content update and chain-of-custody utilities for the entire 12-interactive exhibit
  - Newseum: The Berlin Wall Experience (assistance, tooling, and support only)
  - Comcast Local Media Development: *His Dreams, Our Stories: Voices of the Civil Rights Movement* (currently at the Newseum, the National Civil Rights Museum, the Charles H. Wright Museum, the DuSable Museum of African American History, and as a traveling exhibit)
  - National Museum of the American Indian: <u>Many Languages</u>, <u>Protocol Matters</u>, <u>What Would You Do?</u> (and a <u>Web</u> <u>version</u>), and production support for all 5 interactives in the <u>Nation to Nation</u> exhibit
  - National Museum of the United States Army: Army 101, Army Interactive Timeline, and Army Touch Table
  - National Museum of Natural History: <u>Dig It: The Secrets of Soil</u> (HTML5 prototype), untitled crop rotation game (prototype)
- Marketing, monetization, and brand development of *Challenge of the Athlonauts*, a gamified medical analysis tool for Children's National Medical Center
- Development, maintenance, and support for an online and on-DVD learning management system for the Global Alcohol Producers Group
- Development of a remote control system for a video wall for Intelsat
- Development of paid streaming video websites for National Council of University Research Administrators, International City/County Management Association, and International Launch Services
- Maintenance of online streaming video websites for International Launch Services and Tax Talk Today
- Support for development of IAB-compliant banner and pre-roll advertisements and landing pages for NewDay USA
- Development and maintenance of bespoke brochure sites
  - o Airfare America
  - Interface Media Group (three versions of main site)
  - International Launch Services (lobbying microsite)
  - Honold Communications (two campaign sites and portfolio site)
  - o McCarthy Hennings Whalen
  - Global Alcohol Producers Group (four sites)
  - NewDay USA (four sites)

#### mindSHIFT Technologies Internal Systems Engineer / Network Operations Specialist June 2007 – October 2011

- Advised customers of outages, disk failures, disk space usage issues, network incursions, and other significant issues
- Removed virus and malware infestations and other inappropriate material from customers' servers
- Removed broken, out-of-control Systems Management Services installations that generated over 24 million files each
- Recovered an enterprise CRM database, fixed corruption, and wired it into their new CRM infrastructure
- Designed, implemented, and deployed a ten-foot-experience front end to the SolarWinds, MonitorIT, and What's Up Gold network information systems, using WPF and MS SQL
- Provisioned accounts in Active Directory, Exchange, Apropos, Microsoft Dynamics CRM, and the office security system.
- Imaged and serviced workstations using Symantec Altiris and Dameware.

- Managed a 10,000-DID Cisco VOIP phone infrastructure.
- Customized Cisco IP Phone interfaces to interact with customer relations management software.
- Designed, implemented, and rolled out a billing system based on call detail records from VOIP phone system provider BroadSoft.
- Designed, implemented, and deployed an application to visualize storage usage
- Maintained three websites, two in SharePoint, and designed newsletters with circulation of approx 15,000 per quarter.
- Documented procedures for processes related to custom software for PTO, expenses, fault reporting management, HR, and others.
- Redesigned the existing Microsoft Dynamics CRM 3.0 workflow infrastructure to utilize resources more efficiently using new and expanded features in Microsoft Dynamics CRM 4.0.

**Micro Center** 

Sales Associate, Peripherals Department

November 2006 – February 2007

# **Freelance Experience**

**TwelveBaud Studios** 

September 1999 – Present

- Developed an additional campaign in Lua for Puzzle Quest 2, a single player match-3 adventure game
- Developed and administered a single sign on system for the Honeybee Public House
- Ongoing development and administration of web sites, mail services, chat services, identity providers, etc

PC Element August 2011 – August 2019

- Maintained brochure site
- Created a mod for Factorio for storing large quantities of raw materials
- Added a limited multiplayer mode to Kerbal Space Program to sync players' craft between worlds
- Extended the Minecraft tool Overviewer with mod support and real-time player data
- C#/C++ community server development for Phantasy Star Online, following sunset by Sega

**Hydraulic Games** May 2007 – April 2013

- Community ambassador
- VB.NET tools developer for Charred Dirt, a multiplayer tank game
- Emergency repairs in C++ for Charred Dirt

Kwivira May 2013

Prototyped a streamlined information submission system for loan processing in Java Server Pages

Awaxa September 2003 – June 2012

- Developed an untitled MMO in Java with full internationalization support, intended to promote language learning
- Developed and maintained a chatbot module in Python for storing and converting medical information for the "/r/diabetes" community on Reddit

HitGrab Studios June 2008

• Developed browser toolbar for their social media game Mouse Hunt.

#### Education

University of Virginia Wise, VA August 2009 – May 2012

Double-major in Computer Science and Software Engineering (incomplete)

Northern Virginia Community College Arlington, VA August 2006 – August 2009

Double-major in Computer Science and Information Systems

## **Certifications and Awards**

Microsoft Certified Desktop Service Technician: Windows XP
Microsoft Certified System Administrator: Windows Server 2003
Microsoft Certified Technology Specialist: SQL Server 2005
Unity Awards 2017 (Finalist): The Berlin Wall Experience
TIVA DC Peer Awards 2017 (Gold): The Berlin Wall Experience

Am. Ass'n of Museums Excellence in Exhibition 2016: Nation to Nation

## References

Troy DubenezicDevOps Engineer, Interface Media Group(202) 861-0500 x774Jordana WellVice President of Experience Design, Yes&(202) 454-4297Alex SeidelDatabase Developer, Merkle Inc(434) 987-6608Roy HigashiAudio Engineer, Hydraulic Games(240) 426-9929