



JAMES BARCLAY
DEVELOPER & DESIGNER

PH: +1 (810) 624-2458
EM: JAMES@EVERYTHINGISGRAY.COM
TW: @FUTUREIMPERFECT
WEB: HTTP://EVERYTHINGISGRAY.COM

Summary



Specialties: Automation, native apps, security, internal tools engineering, web apps, IT operations engineering, UI/UX design

Languages: Python, Objective-C, Shell, PHP

Databases: MySQL, PostgreSQL, Redis

Experience

Tools Engineer, Pinterest, Inc. San Francisco, CA 2014 -

- Wrote software in Python to automate our employee on-boarding and off-boarding process. This reduced the amount of time required to onboard a single employee from days to minutes.
- Wrote multiple Web applications in Python with the Flask framework. Examples include an internal tool that employees use to request an identity certificate without ever transmitting the private key, a digital signage tool that allows employees to control Mac minis through a browser, and a Web hook that processes offer acceptances from our applicant tracking system.
- Wrote software to automate our engineering promotion process cycle. Previously, this was done manually by HR aggregating hundreds of documents into single PDF "packets."
- Added SAML support to several internal tools to improve security posture.
- Wrote an internal URL shortener with a user system and SAML authentication.
- Wrote software to map IP addresses to LDAP users and forward to Splunk.
- Improved how employees are automatically granted employee level access to the Pinterest admin tool.
- Support and administer an OpenLDAP system used by tens of thousands of clients.
- Participate in an on-call rotation for both IT systems and security.

Senior IT Consultant, The Linde Group, Inc. Berkeley, CA 2012 - 2014

- Designed and developed a Mac application in Objective-C/Cocoa used by thousands of remote employees to migrate to new laptops without intervention from IT staff.
- Designed and developed a virtual machine testing environment used by hundreds of developers to schedule virtual machine reservations. Written in Python with Twisted and Django. Also developed a custom installer and associated shell scripts for enrolling new VM hosts with the system.
- Updated and customized an open source Mac application for an organization that enabled them to migrate hundreds of Open Directory user accounts to Active Directory user accounts on OS X clients.

- Designed and developed a command-line utility in Python for dynamically generating Google groups based on LDAP queries.
- Developed a system for keeping employee records synchronized between an HRIS system and an LDAP directory.
- Designed and developed a command-line utility that enabled a large government agency to migrate users from Windows to OS X.
- Developed a process for automatically alerting key security personnel by email if a non-encrypted SSH key is found on a server or client machine.
- Wrote a multi-domain Active Directory authentication backend for Django.

Engineer, Macprofessionals, Inc. Novi, MI 2010 - 2012

- Co-developed an internal web-based reporting tool with the Twisted Python framework and Nevow Web application framework.
- Designed and developed an iPad “Getting Started” web app for a top 10 University on behalf of Apple that was deployed as a Web clip on every iPad that was issued to incoming freshmen.
- Improved numerous business processes through automation, including shipment notifications and new account information for thousands of remote employees.
- Worked with a small team to migrate a legacy PHP and static site to a modern WordPress site.
- Maintained and deployed infrastructure with Puppet.

Systems Administrator, University of Michigan-Flint Flint, MI 2010 - 2011

- Designed and supported a computer lab and related infrastructure in the Communication and Visual Arts department.
- Architected a directory system for authentication and management.
- Configured network accounts on client workstations.
- Designed and configured an imaging system and deployment workflow for new workstations.

Mac Genius, Apple Inc. Novi, MI 2007 - 2010

- Designed and developed an internal communications site in PHP/Drupal.
- Worked under extreme amounts of pressure to resolve technical problems quickly and efficiently for Apple customers.
- Performed repairs on desktops, notebooks, and portable devices.

Freelance Web Designer/Developer Flint, MI 2005 - 2012

- Built multiple WordPress and Drupal sites for clients and personal use.
- Designed and developed a WordPress theme that has been downloaded more than 10,000 times, (see wordpress.org/extend/themes/simplicity).

Open-Source / Commercial Software

AutoPkgr (Objective-C) - Original Developer (current contributor) - lindegroup.com/autopkgr - Open Source

TMNotifier (Objective-C) - Lead Developer - tmnotifier.com - Commercial

Technical Certifications

ACS - SaM - Apple Certified Specialist - Security and Mobility

ACTC - Apple Certified Technical Coordinator

ACSP - Apple Certified Support Professional

ACMT - Apple Certified Macintosh Technician

ACA - MIB - Apple Certified Associate - Mac Integration

ASP - Apple Sales Professional

MTC - Apple Mobile Technology Competency

ACWA - Aerohive Certified WLAN Administrator

CCA - Certified Casper Administrator

Public Speaking

September 2015 - **Macbrained at Square** - San Francisco, CA - Working with System Frameworks in Python and Objective-C

July 2015 - **PSU MacAdmins** - State College, PA - Working with System Frameworks in Python and Objective-C

August 2014 - **Macbrained at Zendesk** - San Francisco, CA - Creating GUIs for Command-Line Utilities With Objective-C/Cocoa

January 2014 - **Macbrained at The Linde Group** - Berkeley, CA - *Command-Line Productivity for Mac Admins*

October 2013 - **JAMF Nation User Conference** - Minneapolis, MN - *Ghost in the Cloud: Deploying the JSS on Amazon EC2*

August 2013 - **5by5 Systematic Podcast** - *James Barclay, the IT in Creativity*

Education

University of Michigan-Flint — BFA in Visual Communications, 2008-2011

**UX Designer, Undergraduate Research Opportunity Program (UROP),
Locusono iOS application** UM-Flint, 2011

Worked with Professor Joseph Reinsel (Communication and Visual Arts) and several UM-Flint graduate students from the computer science department to design and develop a functional prototype iOS application. Was responsible for devising user interaction scenarios, usability testing, and designing all visual elements of the application — including the icons and layout. Worked within the constraints of Apple's Human Interface Guidelines (HIG). Presented on the project at the UM-Flint Student Research Conference and the Meeting of Minds Undergraduate Research Conference at Oakland University.

Awards

March 2015 - Winner (1 of 7) - Pinterest "App-a-Thon" presented at Pinterest in San Francisco, CA

July 2014 - 1st Place - Macbrained "Hack the Mac" Hackathon presented at Square in San Francisco, CA