# **Andrew Perry**

Mid Level Software Engineer
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# **OBJECTIVE**

Dedicated, determined, and experienced individual eager to prove ability, perform tasks beyond expectations, and exhibit technical skills using professional communication, planning, and analytical skills. I am looking to build my career as a software developer with an excitement for learning any new technologies that await me.

#### **EXPERIENCE**

## Tinybop, Inc. — Brooklyn, NY

Mid Level Software Engineer — March 2017 to Present Junior Developer Software Engineer — July 2014 to March 2017

- Created educational apps for iOS and tvOS using Unity3D.
- Worked with a team of designers, technical artists, and educators using Agile methods.
- Worked with languages such as C#, Swift, and Obj-C to create and deploy apps to devices.
- Created toolsets used by technical artists in the Unity3D environment.
- Developed in MonoDevelop and XCode integrated development environments.
- Was a developer on the following Tinybop titles: Homes, The Robot Factory, The Monsters, Skyscrapers, Me, and Mammals.
- Took on a developer support role for The Weather, integrating it with our user dashboard that was written in Swift.
- Worked with storyboards in XCode to create the User Interface for The Everything Machine.
- Was a part of Apple's Green Lantern project for Earth Day making changes to our user dashboard for our Earth app, as well as adding new content such as full-screen popovers used for incentivizing the purchase of our in-app feature for that campaign.

#### **FM Global** — Norwood, MA

GIS Analyst / Programmer — February 2013 to June 2014

- Provided GIS support while also working on a global flood model creating maps for delineating flood zones for 100 and 500 year floods using all available GIS and data resources.
- Automated work using parallel processing and subprocessing in Python.
- Used R Statistics with Python (RPy2) for automated DEM smoothing using 2d wavelets.
- Worked with GRIB2 data from NOAA. Fortran was originally used for data extraction which I then
  converted to Python and C. Python was used to FTP to the site for data acquisition and C to write
  data to a SQLite database.
- Used C-Types in Python to access C .dll to allow for Python script to run seamlessly.
- Used NetCDF C Library to read and write and perform calculations on NetCDF hourly files. The result was a file holding hourly data for 31 years for the entire globe. The C tool allowed the user to query by location and by number of years.
- Due to ArcGIS' lack of a necessary tool, I created a C# application to create points and cross sections along river shapefiles by specifying distances between points and cross sections as well as the length of the cross sections.
- Implemented ArcObjects to create simple ArcGIS plugins for ArcMap, such as a button that converts all raster data currently open on the map to the same color scheme.

# National Renewable Energy Laboratory — Golden, CO

GIS Analyst — December 2011 to February 2013 GIS Intern — May 2011 to December 2011

- Worked with vectors and raster imagery (reclassifying, georeferencing, digitizing, tabulating areas, mosaicing, data extraction, and weighted analyses).
- Implemented geoprocessing scripting and modeling for data extraction and manipulation from various spatial and non-spatial sources for multiple projects using Python.
- Uploaded, maintained, and ran spatial functions on datasets in PostGIS.
- Used spreadsheets to create spatial data with PostGIS using command prompt and Python (Psycopg).
- Worked with different natural resource data and created aggregated datasets that were used for supply curves.
- Provided GIS oversight for a wind deployment barriers project that focused on the cost and location of available wind where turbines could be built with limited effects on radar, public acceptance, transmission and wildlife.

# Kleinfelder East, Inc. — Bohemia, NY

Environmental Scientist — September 2007 to July 2009

- Worked with clients to organize solutions for the remediation of contaminated groundwater and soil.
- Provided oversight for drilling activities (soil borings and well installations) and classified soils as per ASTM standards.
- Overlooked the removal of underground storage tanks and excavation of contaminated soils.
- Provided health and safety support and air monitoring for high risk activities.
- Assisted in writing quarterly monitoring reports describing progress of work on site.

## **EDUCATION**

#### Master of Science in Environmental Science

University of Colorado at Denver; Denver, CO — 2009 to 2011

#### Bachelor of Science in Environmental Science

Rochester Institute of Technology; Rochester, NY — 2003 to 2007

## **SKILLS**

Python (6 years), C# (4 years), Swift (2 years), Obj-C (2 years), C++ (1 year), C (1 year), Javascript (1 year), HTML (2 years), CSS (2 years), ASP.NET (<1 year), React.js (<1 year), Git (4 years), Machine Learning (<1 year), R Statistics (1 year), GNU Octave (Less than 1 year), Unity3D (3 years), PostGIS (3 years), PostgresSQL (3 years), ArcObjects (2 years), ArcPy (4 years), Excel Scripting (1 year), ArcGIS (5 years), QGIS (2 years), Visual Studio (2 years), MonoDevelop (4 years), XCode (4 years), Mac OS X (7 years), Windows XP (8 years), Windows 7 (6 years), Windows 10 (1 year)

## **CERTIFICATIONS AND ACHIEVEMENTS**

- Machine Learning August 2016 to October 2016 <a href="https://www.coursera.org/account/accomplishments/certificate/T426KQ8KND4C">https://www.coursera.org/account/accomplishments/certificate/T426KQ8KND4C</a>
- The Robot Factory Apple's Best App of Year for iPad https://tinybop.com/blog/tinybop-tops-app-stores-best-of-2015