name: **Max Plomer**

email: maxplomer@gmail.com

phone: (203) 945-8606

website: http://www.codingprojects.co

location: 598 Broadway, New York, NY 10012

**Education**:

- school: **App Academy**

location: New York, NY

description: Code Bootcamp

topics: Ruby, SQL and Rails associations, Rails user authentication, JavaScript, Backbone.js, CSS

dates: Sept 2014 - Nov 2014

- school: **University of Connecticut**

location: Storrs, CT

degree: Master of Science in Mechanical Engineering, GPA: 3.5/4.0

completed: May 2013

- school: **University of Connecticut**

location: Storrs, CT

degree: Bachelor of Science in Mechanical Engineering

completed: Dec 2010

**Experience**:

- company: **The Psalm of Howard Thurman Documentary Film**

location: Boston, MA

position: Developer

starting: Apr 2015

highlights:

- Generated Ruby on Rails app using Rails Composer, integrated customized Bootstrap Template and styled modal

- Adapted the Devise-Bootstrap user management system provided by Rails Composer into an admin dashboard

- Utilized sendgrid-ruby gem to email Contact Us messages and subscribe requests using SendGrid API

- Empowered artist to edit site content and then see updates instantly by using Google Drive shared folder as a web server

- Authored YAML representation of site data that is hosted in Google Drive and parsed by the Rails app during requests

- staging URL => http://howardthurmanfilm.herokuapp.com

- company: **FreeFundraise.com**

location: Boston, MA

position: Developer

starting: Feb 2015

highlights:

- Engineered API-driven Backbone.js app that allows you to shop and give to the charity of your choice for free

- Designed and implemented user interface with carousels programmed in Backbone.js, using jQuery fading methods

- Using model and collection operations allowed users to either select a featured charity or to explore all charities

- Integrated with Amazon, eBay and FlexOffers affiliate programs by investigating all required formats of passing query string parameters, which allowed tracking of the charity being donated to

- Integrated charity tracking ids into each unique set of query string parameters required by Amazon, eBay and FlexOffers affiliate programs

- company: **Outlearn.com**

location: Boston, MA

position: Consultant

dates: Jan 2015 - Feb 2015

highlights:

- Researched topics to facilitate technical training, and formatted content into prototype format

- Integrated with GitHub by importing repositories and allowing login using GitHub account

- Experimented with JavaScript Fancytree library, a dynamic tree view plugin for jQuery, to display imported contents

- Engineered advanced coding challenges using RSpec tests for Ruby and Jasmine tests for JavaScript

- Created interactive terminal sessions for Ruby, JavaScript and PHP using jq-console, a jQuery plugin

- company: **Westport, CT and World Maker Faires**

location: Westport, CT and New York, NY

position: Presenter

dates: Apr 2014 (Westport) and Sept 2014 (World)

highlights:

- Presented the science behind the Clean Fuel Chemical Kinetics software package and how it can be used to model clean fuels in the engines of tomorrow

- Articulated reaction rate and Lagrange multiplier problems to teach science and math to faire attendees

- company: **Saigeworks LLC**

location: Trumbull, CT

position: Consultant

dates: May 2014

highlights:

- Utilized my chemical kinetics software to help inventor transform hands-on experience into concrete engineering terms

- Determined 2.4 kJ of work and 3.3 kJ of heat for methane and 3.0 kJ of work and 5.1 kJ of heat for hydrogen produced in one cycle per gram of fuel and oxygen at stoichiometric ratio

- company: **University of Connecticut**

location: Storrs, CT

position: Teaching Assistant for Combustion, Compressible Flow, Renewable Energy, Senior Design Project

dates: Jan 2011 - Dec 2012

**Projects**:

- project: **CarbonFootprint.co**

starting: May 2015

source: http://www.github.com/maxplomer/carbon-calculator

highlights:

- Architected form-driven AngularJS app that persists data to Ruby on Rails backend

- Added user authentication using Devise and the angular-devise AngularJS service

- Designed architecture to perform carbon footprint calculation in Ruby on the backend and send result to AngularJS frontend via API as an attribute in the ActiveModel Serializer

- project: **AndrewTalty.tv**

date: Apr 2015

source: http://www.github.com/maxplomer/andrewtaltytv

highlights:

- Ruby on Rails app that uses jquery-tubular plugin to display a responsive YouTube video in portfolio page background

- Detected browser type using jQuery browser identification then displayed a still image background for mobile devices

- Blurred social media and video control buttons using the text-shadow CSS attribute

- project: **JavaScriptSandbox.com**

date: Dec 2014

source: http://www.github.com/maxplomer/javascript\_sandbox

highlights:

- Constructed online coding playground using Ruby on Rails and Backbone.js, great for evaluating user-submitted HTML, CSS and JavaScript code safely in the browser

- Architected user authentication using current\_user Rails controller and corresponding current\_user Backbone.js Model  
 - Selected Bootstrap navbar component to create intuitive site navigation

- project: **RealEstateTracker.co**

date: Dec 2014

source: http://www.github.com/maxplomer/real\_estate\_tracker

highlights:

- Presented complex financial analyses for investment properties using instantly updating forms and compelling diagrams

- Communicated data to server using jQuery Ajax requests from the Ruby on Rails view

- project: **CodingChallenges.co**

date: Nov 2014

source: http://www.github.com/maxplomer/coding\_challenges

highlights:

- Enlisted Ruby on Rails to create community where users can compete and boost their programming skills

- Utilized Ace high performance code editor to deliver code syntax highlighting for Ruby, JavaScript and SQL

- Jailed user submitted code as to only permit safe method calls

- project: **BitChart.co**

date: Nov 2014

source: http://www.github.com/maxplomer/finance-clone

highlights:

- Built application using Ruby on Rails and Backbone.js where you can participate in a stock investing competition

- Developed performance graph that plots user profit on a daily basis using optimized algorithm that analyzes stock market data stored in database; speed increased 20x after optimizing SQL queries

- Applied Heroku scheduler and market\_beat ruby gem to pull stock market quotes and save to database

- project: **Computing Package for Thermal Gas-Phase Chemical Reactions**

dates: June 2013 - Dec 2013

fuel-specific packages available at: http://www.combustionhelp.com

highlights:

- Programmed simplified chemical kinetics software package using high-level programming languages

- Investigated CHEMKIN-II mechanism format, NASA polynomials for thermodynamic data, Arrhenius/Lindeman/Troe form reactions, programming language speeds and license costs

- Applied MATLAB profiler to improve inefficiencies; time to converge constant volume reactor was reduced from 619 sec in initial version to 0.8 sec, which is substantially closer to CHEMKIN converge time of 0.5 sec

**Technology Skills**:

Languages: Ruby, JavaScript, SQL, HTML, CSS, MATLAB, C, Fortran

Tools: Ruby on Rails, AngularJS, jQuery, Backbone.js, Ember.js, Git, Linux, AWS, Heroku

Hobbies: Raspberry Pi, Unity3D

Favorite Ruby Gems: rest-client, whenever