

# Alex Blank

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### PROFILE

Strong C# programmer with full-stack experience developing both web and desktop applications using the latest technologies from the Microsoft stack. I hold a Master's degree in Computer Science from the Rochester Institute of Technology with a focus on security and cryptography. I incorporate knowledge of design patterns and software development best practices into my work, including an awareness of security-related issues and an attention to detail with respect to user experience. I am constantly looking for experiences that will broaden my skillset and allow me to learn new and interesting technologies and concepts.

## EDUCATION

ROCHESTER INSTITUTE OF TECHNOLOGY		ROCHESTER, NY
Computer Science, Master Of Science → Cluster Election: Security	3.8 GPA	2009 - 2012
Project Thesis: Chaum-Van Antwerpen Under	eniable Signatures On Elliptic Curves	
Computer Science, Bachelor Of Science	2.8 GPA	2001 - 2006

## EXPERIENCE

SENIOR APP DEV · ENTRE COMPUTER SERVICES · ROCHESTER, NY · MAR 2013 - PRESENT

- → Assumed a central role in development of a mission critical MVC app for a Fortune 1000 company
- → Developed web-initiated document scanning functionality, using websockets and TWAIN
- → Devised an algorithm for detecting whether a scanned document page is blank
- ➔ Integrated Melissa Data validation service over XML using custom heuristics,
- → Introduced .NET TAP asynchrony for increased server responsiveness across the application
- → Introduced aspect orientation using PostSharp as a way to consolidate logging concerns
- ➔ Designed and developed custom, reusable client-side model-bound controls utilizing jQuery and MVC:
  - $\circ$  ~ Date picker with multi-calendar views (jQuery UI), dynamic legend and complex styling (SCSS)
    - Scan, upload, and file display hub that unified disparate file sources, allowed easy model binding, and used a token system to avoid direct object reference vulnerability
- → Designed and developed client-side frameworks for ease of use and reusability
  - $\circ$  Modal window framework to separate boilerplate Kendo UI and dev-specified behavior
  - Validation framework for instances where unobtrusive and jquery.validate did not apply
- → Leveraged visitor pattern to create a customizable ruleset architecture for working with financial records
- ➔ Implemented credit card scanning using Microsoft POS.NET
- → Utilized LINQ-to-SQL with Entity Framework to query SQL Server database
- → Created custom events module with paging in DNN using knockout, bootstrap, and Web API
- ➔ Maintained client mobile apps using Cordova for Android and iOS

#### SOFTWARE ENGINEER · HEARTLAND PAYMENT SYSTEMS · GATES, NY · NOV 2010 - MAR 2013

- → Fully redesigned and rewrote device configuration utility (DevCon) using factory, observer patterns; reduced code size by 40% and noticeably increased application responsiveness
- → Added auto-complete login functionality and other enhancements to TimeClock, a time-keeping application
- → Soup-to-nuts development of an export utility in C#
- → Acted as engineering liaison to third party biometrics provider; provided principal internal biometrics support to customer service representatives
- → Fixed bugs and added enhancements to flagship manager programs in VB6
- → Developed reconnect functionality to a pin pad device in DevCon; tested using ESD machine
- → Wrote HID adapter in C++ for pinpad to eliminate 3rd party constraint

#### SOFTWARE ENGINEER I · ONE COMMUNICATIONS · ROCHESTER, NY · OCT 2009 - SEP 2010

- → Aided in development of vehicle dispatching web app utilizing C#, ASP.NET, SubSonic and AJAX using jQuery
- → Took full ownership of project to add parsing of web app query results into a database for later use
- → Developed an admin page in an ASP.NET web app to allow users to load excel data into an Oracle database
- → Created a Windows service that queried a third party web service and fed results to an Oracle database
- → Involved in team effort to rewrite a Java web service to utilize XML objects instead of CORBA objects
- → Added functionality to an ASP.NET web application and corresponding Java web service

#### SOFTWARE ENGINEER · QUALITY VISION INT. · ROCHESTER, NY · AUG 2007 - JULY 2009

- → Began in test department, writing API test harnesses in C# for NUnit
- → Put in charge of re-orchestrating IPC test infrastructure, streamlined with other NUnit tests
- → Moved to dev team November 2008 to begin work on managed/unmanaged API components in C++
- → Created diff tool for use on internal database files, considered for inclusion in flagship legacy product
- → Refactored classes utilizing polymorphism for code minimization and efficiency

#### SOFTWARE ENGINEER · BIO-KEY INT. · MARLBOROUGH, MA · OCT 2006 - JAN 2007

- → Responsible for conceptual design of integration of mobile solution PocketCop and Oracle Access Manager
- → Responsible for maintenance of COMMS layer code in C++
- → Researched extensively Oracle Access Manager and Oracle Internet Directory
- → Devised web-based form authentication scheme utilizing RSA SecurID plugin within Oracle Access Manager