Darren Cao

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TECHNICAL SKILLS

Languages: C/C++, Java, C#, Ruby, Python, JavaScript, HTML, CSS, SQL **Tools:** git, bash, vim, IDEs
Frameworks: Ruby on Rails, React, NuclearJS (Flux), .NET, AngularJS, jQuery, Bootstrap, Android

EDUCATION

University of Waterloo – Bachelor of Software Engineering *Sep 2013 – present (class of 2018)*

- Cumulative Average: 87% (**3.9**/4.0 GPA) – **Top 10** in class, Dean's Honors List

EXPERIENCE

Riviera Partners – *Full-Stack Developer (Ruby on Rails, React)* *San Francisco, CA (May 2016 – Aug 2016)*

- Unified external mailboxes with the matching platform, allowing recruiter emails to be archived to candidate and client applications for centralized applicant details, conversation history, and reach-outs
- Added employment wins feature used on all profiles to evaluate achievements based on company success
- Rewrote notifications handling architecture to enable different user roles to manage their preferences
- Fixed issues with Elasticsearch indexing and Sidekiq job processing, increasing scalability and reliability
- Improved agile and coding practices by setting up seeded development environments and RSpec unit tests

DBRS Limited – *Full-Stack Developer (C#, AngularJS)* *Toronto, ON (Sep 2015 – Dec 2015)*

- Built the rating checklist workflow used by all analysts to ensure compliance with each regulatory step
- Designed analytics dashboard for tracking methodologies, powering insight into effective credit analysis

Ultimate Software – *Applications Developer (JavaScript, HTML, CSS)* *Weston, FL (Jan 2015 – Apr 2015)*

- Created an interactive page-scraper allowing non-technical users to generate Selenium tests; released internally to the testing team and managed hotfixes, support, and successful iterations based on feedback

Toronto Hydro – *Systems Engineer* *Toronto, ON (May 2014 – Aug 2014)*

- Constructed an automated report builder for monthly finances, reducing manual input time by over 200%

PROJECTS

Snapfilters – *C++, OpenCV, OpenGL* *https://github.com/dcaoyz/snapfilters*

- Researched and implemented Snapchat-like filters using computer vision and graphics libraries in C++
- Created effect overlays by generating a face mesh through Haar Cascades and applying textures on top
- Tracked gestures using expression classifiers to trigger filters on customized events

ICUbot – *C#, Node.js* *https://github.com/ICUbot*

- Built an interactive surveillance robot that chases intruders; **$5k Microsoft Prize Winner** at HackPrinceton
- Implemented pathfinding algorithms using sensor data, and integrated social media for sharing live updates

Jane Street: Algorithmic Trading Competition – *Java* *https://github.com/dcaoyz/janestreetetc*

- Designed adaptive, real-time algorithms applying arbitrage strategies in a market simulator; placed **Top 8**

MNIST Reader – *Python* *https://github.com/dcaoyz/mnistreader*

- Applied machine learning techniques to classify a computer vision dataset of handwritten numbers