Charles B. Dawson

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Education

- **Harvey Mudd College**   **Claremont, CA**
  Bachelor of Science   *Expected, May 2019*
  Relevant Coursework

    Principles of Computer Science; Data Structures & Program Development (Anticipated, Spring 2016)

- **Maret High School**   **Washington, DC**
  Valedictorian, GPA: 3.99   *June 2015*

    – Took AP courses in Computer Science, Economics, Calculus, Chemistry, and Physics

- **Honors and Awards**

    – Harvey S. Mudd Merit Award (2015-present)
    – National Merit Scholar 2015

- **Study Abroad:** Summer Abroad in Taipei, Taiwan 2013

Skills

- **Programming Languages:** Proficient in Python, Ruby, Arduino, and the Unix-style terminal
  Familiar with Go, JavaScript, Java, and LaTeX.
- Conversant in Chinese • Experience with 3D design software (Blender) and 3D printing

Relevant Experience

- **The Rock Creek Group**   **Washington, DC**
  Software Development Intern   *May 18, 2015 – May 29, 2015*

    – Extended the Rock Creek Group's internal toolset to automatically generate monthly portfolio performance reports, reducing the employee time needed to generate a PowerPoint presentation for a client from more than one hour to less than five minutes
    – Developed efficient algorithms to aggregate statistics from a large dataset spanning multiple years of historical financial data using Python, Django, and the NumPy/Scipy environment

- **Solution Street, LLC.**   **Herndon, VA**
  Web Development Intern   *June 30, 2014 – August 1, 2014*

    – Extended the application architecture of Solution Street's internal time-tracking and invoicing website (using Ruby on Rails) to include representations of client- and project-specific requirements, allowing the firm to be more proactive in meeting clients' needs
    – Redesigned interface using Javascript, JQuery, HTML, and CSS to make information about client requirements more readily available to employees working on client projects, reducing friction and improving communication between Solution Street employees and their clients

- **Personal Projects & Open Source Contributions**

    – Wrote a Python utility for tracing Bitcoin funds through the blockchain, a genetic algorithm implementation in Java, a Markov chain-based Shakespearean sonnet generator in Java, and a letter frequency decryption engine in Java
    – Contributed to Bok-Choy, a Python UI-level acceptance test framework, and BitHub, a Java widget that rewards GitHub commits to open source projects with Bitcoin.

Leadership Activities

- **Engineering Team Captain**   Maret High School
  Competed in the Marine Advanced Technology Education Center ROV Competition

    – Coordinated multiple sub-teams working on various aspects of robot design
    – Managed the 5-person digital systems design and implementation sub-team