Miles Wu: Resume

(609) 216-3812 mawu@princeton.edu

University
Education

Princeton University, Princeton NJ

(expected:) June 2012

- Physics Major
- GPA: 3.94 in major, 3.68 overall

$\begin{array}{c} \textbf{Academic} \\ \textbf{Honors} \end{array}$

Kusaka Memorial Prize in Physics from Princeton University

2010-2011

Research

Senior Thesis, Princeton University

In progress

• Performing a measurement of the luminosity at the LHC using $Z \to \mu\mu$ decays

Undergraduate Research Assistant, Princeton University

- Worked under Professor Halyo on analyses for CMS (Compact Muon Solenoid) at the LHC, using data from 2011
- Analysed production of double J/ψ with the aim of making a cross-section measurement of both the prompt and non-prompt fraction. Currently working with other members of the group on this analysis, with an expected publication date of early 2012
- Calibrated the absolute luminosity at CMS using Van der Meer scans
- Examined missing mass in $\Upsilon(5S) \to \Upsilon(1S) + \pi^+\pi^-$ decays for evidence of a new resonance
- Generated Monte Carlo simulations of multi-muon jets
- Coded tools that assist with operations of the detector

Junior Independent Work, Princeton University

2010-2011

- Modelled the behaviour of a TES (Transition-Edge Sensor) bolometer and used a Python program to fit experimental data to the model
- \bullet Used BCS theory to examine superconductivity and the existence of two energy gaps in ${\rm MgB_2}$

Skills

Computing:

- Detailed knowledge of many programming languages including: Ruby, C, C++, Python, HTML/CSS, Javascript, PHP, .NET, Objective-C (Cocoa) and Haskell
- Technical competency with many server OSs (Linux, BSD, Mac OS X and Windows Server), networking, SQL, NoSQL and version control

Languages:

- Conversational: French, Cantonese Chinese, Mandarin Chinese
- Latin, Classical Greek

Extra-curricular Activities

Design Director, Business Today, Princeton University

2008-2011

- Led the design team on the layout of a magazine with a circulation of over 100,000
- Assisted with the editing of articles
- Liased with the printers and various advertising clients

President, Anime-Manga Princeton, Princeton University

2011

- Previously was treasurer for two years, managing funding and finances
- Organize events for members, including an annual trip

Programming

- Work and often collaborate on various open-source programming projects
- Learned many different programming languages
- Manage a few UNIX servers