

Brunston Poon
St. Paul's School (Class of 2016)
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Summary of Experience and Qualifications:

- **Intern – Dr Mathews, University of Hawaii At Manoa** (June 2015 through Present)
 - Writing stellar spectra reduction and analysis CLI software in Python using numpy, Pillow and matplotlib. Used for analyzing uncompressed TIFF stellar spectra images I have gathered using a self-built low-cost experimental setup.
 - Paper currently being drafted on low-cost stellar spectroscopy in a secondary school environment.
- **Artificial Intelligence Experience** (Coursework, September 2014 to June 2015)
 - Explored paradigms surrounding the LISP language concerning algorithm streamlining and optimization
 - Created and implemented machine learning / genetic blackjack algorithm in Python
- **Teaching Assistant @ Nueva Summer** – The Nueva School (June 2014 through August 2014)
 - Assumed Lead Teacher position on different occasions with 30 minutes' notice, creating and adapting curriculum to lead three-hour classes of 20 students.
 - Created and implemented curriculum components through methodical design thinking processes to foster innovative learning and emphasize students' untapped creativity.
- **Content Assistant – Khan Academy** (August through October 2013)
 - Multimedia quality assurance for Khan Academy Online Educational Platform's video content ensuring high standards of quality for Khan Academy products.
- **Intern – The Nueva School** (August 2013)
 - Executed organizational methodology and assisted in moving and installing A/V equipment at both campuses.
- **Intern – Khan Academy Discovery Lab** (June through July 2013)
 - Created audio/video documentation for Discovery Lab
 - Assisted with implementation of project-based learning at Discovery Lab.
 - Included robotics – both Arduino-based platforms and gate-based bots
 - Designed curriculum worksheets for Discovery Lab guest lecture on binary, logic gates and computer systems under major time constraint (one hour notice) – displaying adaptability and quick-footed thinking.
 - Youngest paid intern at Khan Academy (as of July 2013), first intern at Discovery Lab. Interns usually are in undergraduate or graduate programs at high-ranking universities.
- **Personal Project – Remote Control Airplane Design** (February through August 2012)
 - Designed and built fully functional remote control (via computerized remote) airplane from ground up.
 - Adjusted airfoil for balance between good stall behavior, maximum lift, and drag. Explored and designed unconventional fuselage designs. Created airfoil shape based on predicted payload weight (servos, receiver, etc.) and center of gravity.