

# NewtOS<sup>1</sup> - a PhD Proposal<sup>2</sup>

No OS is truly affordable<sup>3</sup>. The only reason we have any OSes, like Unix is because of massive subsidy by the US DoD and AT&T subsidy of a bunch of hippies at Berkeley and Bell Labs<sup>4</sup>. Linux is the product of subversive anarchists who, like script kiddies, are just messing with your mind. The only half way decent product is Apple's OSX, which is still based on DARPA projects (MACH and BSD)<sup>5</sup>. Windows is of course a NOTOS<sup>6</sup>.

This proposal is for a programme of work to build an affordable OS<sup>7</sup>.

NewtOS builds on principles (mathematical ones at that) explored by Sir Isaac Newton (so the examiners better be from Trinity). Our first principle is based on celestial (and pool hall) mechanics: hence, if a process starts, it will continue until it is acted upon by a force (a.k.a. signal), leading to the first principle of the *Inertial Scheduler*. The Inertial Scheduler looks at the momentum of a process and lets it continue on its way unless someone applies a "cue". (A cue is the visual representation of a signal).

The second principle is that *CPU and Memory are equal and opposite*: Hence if a task takes too much memory, we give it more CPU and so forth. This leads to a resource management paradigm we term *Equality*.

Our third principal<sup>8</sup> is that files, like light, can be broken into many equal pieces - the *Prismatic* file system distributes these pieces over up to seven striped storage devices - any file can be reconstructed provided all seven are operating correctly, which is also an important component of our tamper proof security architecture, known as *Gravitas*: We take security seriously in our design<sup>9</sup>.

We will evaluate our proposal by building the system and porting all the Office applications to it. We will then see what people are prepared to pay for it, taking a market based approach to evaluating our work - we will run a campaign in the Cambridge Evening News and on Local Radio, advertising our wares and vary the price and see how this affects the rate of uptake. A sample size of 11 buyers (ones we have identified in the College Bar initially) is probably significant enough to satisfy the average examiner.

In the next month, I will add a work plan and my annotated bibliography of 748 papers, as well as a detailed UML (Usually Mad Library) definition of the APIs for all the components above. The final first year report will be no less than 180 pages<sup>10</sup>.

---

<sup>1</sup>Unoriginal Name

<sup>2</sup>Pronounced "newt oss"

<sup>3</sup>Unsupported assertion

<sup>4</sup>Dubious Ad Hominem attack.

<sup>5</sup>Failure to expand acronyms.

<sup>6</sup>Not an Operating System as we know it, Jim.

<sup>7</sup>A falsifiable hypothesis could be constructed for the thesis, but only if it fails.

<sup>8</sup>Spell Check

<sup>9</sup>This proposal is also too short

<sup>10</sup>This proposal will be too long