



# CSCI – 310 Prep. Systems Software / 593 Intr. Operating Systems

***Dr. Adriano Cavalcanti***

*PhD MABE, MS EE, BSc CSc*

*Computational Nanotechnology & Biomed Robotics*



ST. CLOUD STATE  
U N I V E R S I T Y

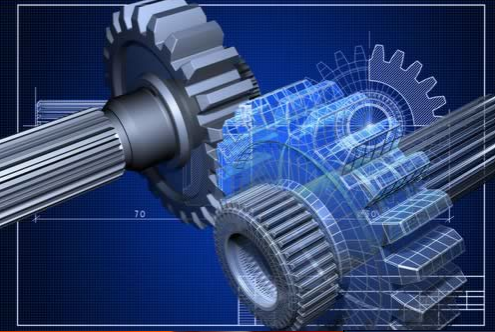
*Office location: ECC246*

*Email: [adriano.cavalcanti@stcloudstate.edu](mailto:adriano.cavalcanti@stcloudstate.edu)*

*Office hours:*

*Check on Syllabus; & by appointment*






# Welcome



In order to succeed,  
we must first  
believe that  
we can.

*Nikos Kazantzakis*



 BrainyQuote®

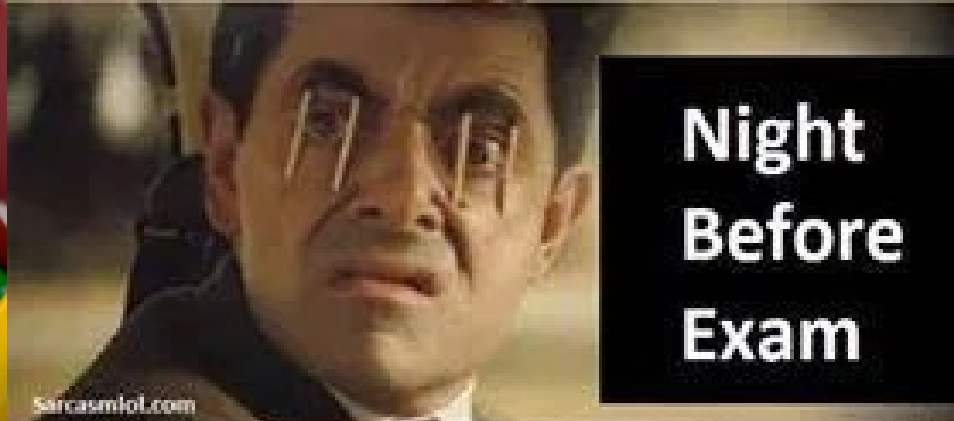
*Dr. Cavalcanti  
a/k/a Dr. Color Candy or Dr. C*



**Whole  
Year**



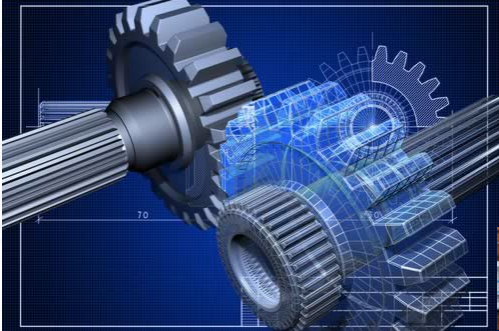
**Night  
Before  
Exam**



**During  
Exam**







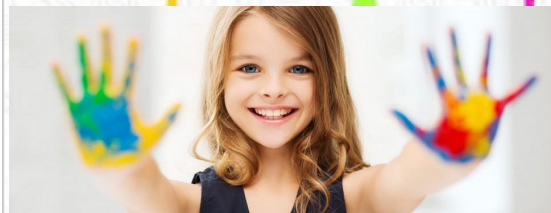
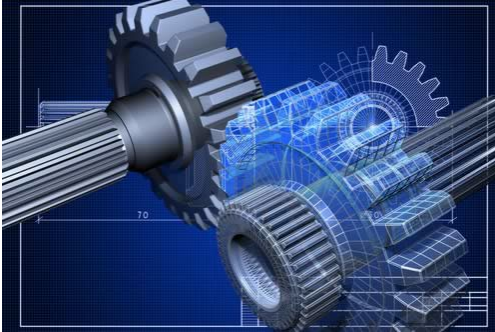
# YOU WANT RESULTS?

GYMQUOTES.CO

# TRAIN HARDER.

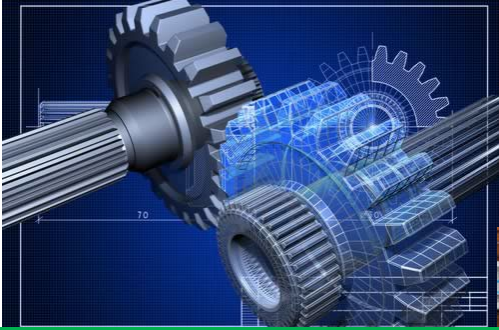






**Note:** Use the scripting language you feel mostly comfortable coding.



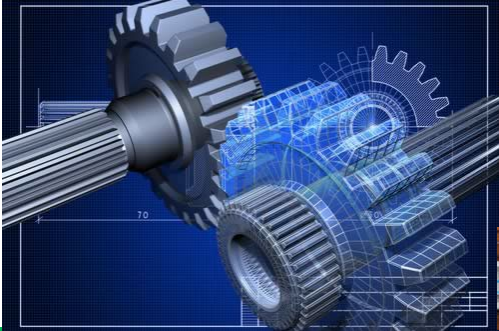


## VPS Mirror Automation



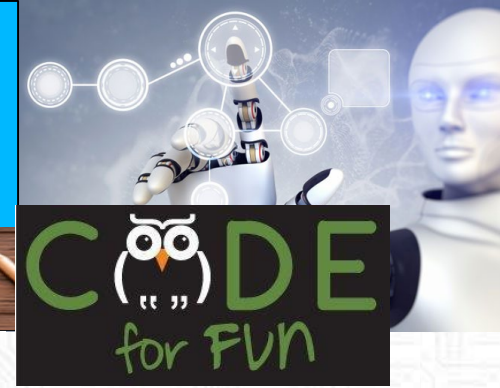
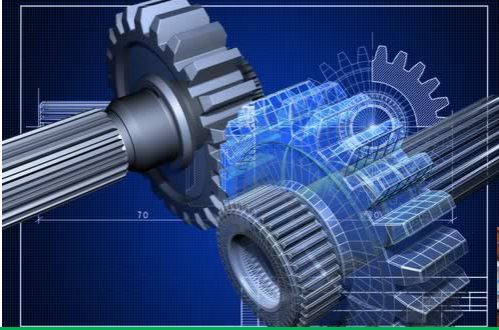
<https://www.unix.com/shell-programming-and-scripting/234567-script-change-name-file-date.html>





## VPS Mirror Automation



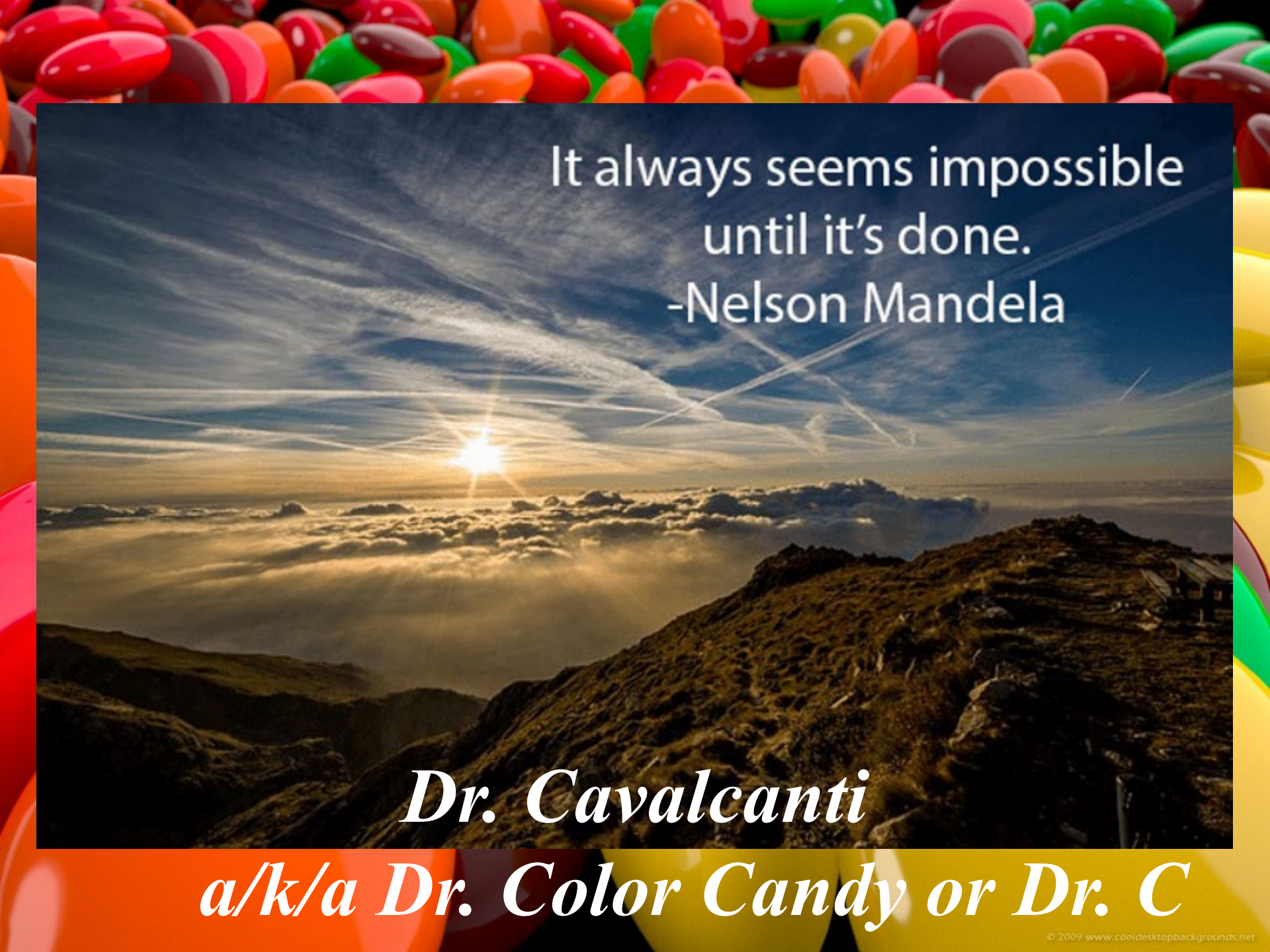


## VPS Mirror Automation

Develop a remote cloud based VPS mirror with the following features:

1. **Have a main server running at least 4 threads; (2 points)**
2. **The threads should share a critical session with shared data;(2 points)**
3. **The mirror (server), should keep up with the events, data and processes running on the main server. (2 points)**
4. **Define and implement the retention policy for the server mirror back up, creating an automation script to run the mirror backup automatically. (1 points)**
5. **Make a power point presentation (15 to 20 minutes), recording the video presentation about the project implementation methodologies and approach. Submit: a short video showing the program in action and showing that both server keep updated as the mirror continuously keep up with changes on the main server, also include a short video with the presentation, plus whole source code and documentation with the steps building the mirror. (3 points)**





It always seems impossible  
until it's done.  
-Nelson Mandela

*Dr. Cavalcanti*

*a/k/a Dr. Color Candy or Dr. C*