SSTV

Perislow

SSTV software http://www.amateur-radio-wiki.net/index.php?title=SSTV software

INTERNATIONAL SPACE STATION SET TO TRANSMIT SSTV THIS WEEKEND (JULY 18 – 19) http://www.rtl-sdr.com/tag/sstv/

RECEIVING SSTV WITH RTL-SDR http://www.rtl-sdr.com/receiving-sstv-with-rtl-sdr/

Instagram / Twitter Bridge (OCR)

Rolling code: http://crypto.stackexchange.com/questions/18311/how-does-a-rolling-code-work

How does Google Authenticator

work? http://security.stackexchange.com/questions/35157/how-does-google-authenticator-work

How do rsa key fobs work? http://stackoverflow.com/questions/512985/how-do-rsa-key-fobs-work

One-time password https://en.wikipedia.org/wiki/One-time password

Datos:

https://www.nngroup.com/articles/response-times-3-important-limits/

Response Times: The 3 Important Limits

Excerpt from Chapter 5 in my book <u>Usability Engineering</u>, from 1993:

The basic advice regarding response times has been about the same for thirty years [Miller 1968; Card et al. 1991]:

- **0.1 second** is about the limit for having the user feel that the system is **reacting instantaneously**, meaning that no special feedback is necessary except to display the result.
- **1.0 second** is about the limit for the **user's flow of thought** to stay uninterrupted, even though the user will notice the delay. Normally, no special feedback is necessary during delays of more than 0.1 but less than 1.0 second, but the user does lose the feeling of operating directly on the data.
- **10 seconds** is about the limit for **keeping the user's attention** focused on the dialogue. For longer delays, users will want to perform other tasks while waiting for the computer to finish, so they should be given feedback indicating when the computer expects to be done. Feedback during the delay is especially important if the response time is likely to be highly variable, since users will then not know what to expect.

MARS FACTS:

http://mars.nasa.gov/allaboutmars/facts/

687 Earth Days

24 hours 37 minutes

How Fast and How Much Data the Rovers Can Send Back http://mars.nasa.gov/mer/mission/comm_data.html
"The orbiters can see Earth for about 2/3 of each orbit, or about 16 hours a day".

Twitter taught Microsoft's AI chatbot to be a racist asshole in less than a day: http://www.theverge.com/2016/3/24/11297050/tay-microsoft-chatbot-racist

What will the astronauts do on Mars?: http://www.mars-one.com/faq/mission-to-mars/what-will-the-astronauts-do-on-mars

- 1. Portada
- 2. Concepto
- Colonia permanente
- Latencia hasta encontrar la ventana.
- Distancia variable con la tierra: entre 3,03 minutos luz a 22,29 minutos luz. Ida y vuelta!
- Sensación de interactividad en tiempo real.
- Orbitadores actuales: Mars Odyssey (2001), Mars Reconnaissance Orbiter (2005), MAVEN (2013).
- 3. Supuestos y limitaciones
- Suponemos que el día es el mismo que en la tierra, y que están Eastern Daylight Time
- Hay gente de varias nacionalidades. Usan Coordinated Mars Time (MTC), pero debe ajustarse al tiempo en la tierra.
- 4. Problema
- A) Interactividad.
- B) Desmoralización.
- C) Capacidad de transmisión.
- D) Autenticación.
- 5. Solución

- A) Al. Likes. Favourites. ¿comments?. Consistencia eventual. Convergencia de Al con datos reales. Merge?
- B) Análisis de sentimiento. Filtros.
- C) HOTP. RFC4226 HMAC-based One-time Password Algorithm.

D)

Interplanetary Overlay Network. RFC 5050
Licklider Transmission Protocol - RFC 5326
LTP authentication extension: RFC 5327.

"By 2008 we should have a well-functioning Earth-Mars network that serves as a nascent backbone of an inter-planetary system of Internets" - rcf 3271. Vinton Cerf

6. Esquema / Arquitectura / Simulación

Servidor Twitter en el orbitador.

- 1. Envío del tweet.
- 2. Llega al orbitador.
- 3. Lo manda a la tierra ASAP.
- 4. En tierra, de

7. Conclusiones

Х

- Suficientes satélites en tierra y marte acabarían con las ventanas.

Bundle Protocol Specification RFC 5050

"Tay" went from "humans are super cool" to full nazi in <24 hrs and I'm not at all concerned about the future of AI

Research shows your social networks affect your mood — and your decisions http://www.pri.org/stories/2015-01-14/our-emotions-and-others-actions-heavily-influence-our-decisions

If you think cryptography is the answer to your problem, then you don't know what your problem is.

Peter G. Neumann, quoted in the New York Times, February 20 2001.

Crabber: Bot de soporte Al. Proporciona feedback inmediato:

- Predice número y ritmo de likes y retweets.
 - Análisis

DSOC (Deep Space Optical Communications) + DTN (Delay Tolerant Networks)

INTERPLANETARY NETWORKING SPECIAL INTEREST GROUP (IPNSIG)

http://ipnsig.org/

Interplanetary Overlay Network (ION): What's New - Scott Burleigh

https://www.youtube.com/watch?v=1zVstd8D3qw

NASA's Advanced Communications Program:An Opportunity for DTN- Donald Cornwell https://www.voutube.com/watch?v=TML8ZPhdxY8

Do radio signals travelling through space attenuate? https://www.guora.com/Do-radio-signals-travelling-through-space-attenuate

Wouldn't the vast distances of space distort SETI signals into unintelligeble forms? (Intermediate)

http://curious.astro.cornell.edu/physics/131-observational-astronomy/seti-and-extraterrestrial-life/seti/795-wouldn-t-the-vast-distances-of-space-distort-seti-signals-into-unintelligeble-forms-intermediate