

My New Tablet

Well, so far we've made it through the last year and all its talk of disaster and apocalypse, either global or fiscal, at least until the next thing pops up. I'm here, and hopefully most of you are too, so we'll call it a win for now. At least there are a few things in the world of Amiga stuff.

A beta release of the SDK (software development kit) for MorphOS 3.2 was put out, which indicates the 3.2 version of the OS itself is on the way, hopefully sooner rather than later. Exactly how this relates to planned support for wireless networking, Mac Powerbook 3D graphics, the SAM 460 board, or G5 processors is unknown, but it seems likely at least one will be covered.

DiscreetFX keeps pushing back the official opening of "Project Metropolis," an Amiga-and-friends on-line app store, currently set for the end of February. I have no idea if such a thing is viable, but it's at least an idea with merit as one of the bigger hurdles in doing any commercial Amiga-family software in this day and age is getting small developers from all over the world exchanging software and money with a small customer base also all over the world. A centralized app store intermediary should make it easier for the developers to do their thing without needing to worry about the commerce channel while the customer would (hopefully) be more inclined to buy software if they don't need to be concerned about what country they're attempting to send a payment to. I don't think it will ever be like other "app stores" where nearly everything is available for just a few bucks, but if it can do for Amiga pay software what a repository like Aminet (and Fred Fish

before that) did for Amiga freeware and shareware, it can't be too bad.

As some of you already know, I am now part of the "Tablet crowd," being the reasonably proud owner of a Samsung Galaxy Note, running Android 4.1 (AKA Ice Cream Sandwich). Like most similar systems, they are designed around the concept of ease-of-use and touch screens above all else. To that end, the OS is pretty easy to use, though the linux roots of Android do allow the user to dig a little bit deeper, with things such as file managers, task managers, and the like, which I understand thanks to my years-slash-decades of desktop computer experience. I don't have a lot of experience with Apple's iOS devices, but I kind of suspect that level of control is probably hidden from the end user, as it's easy to mess up if you don't know what you're doing. I don't always know what I'm doing on this new device, not in small part because I like to fly by the seat of my pants, especially when a piece of technology is not difficult to deal with. One thing I would wish for is a more standard means for shutting down software. As it stands, the official method is to hit the "back" button on the "main" screen of the app you wish to close, which conceptually is like backing out of the front door of a building, and expecting it to disappear. Other buttons might take you back to your "desktop" or "workbench" or whatever Android calls it, but they leave the program you left running in the background, eating up memory and even CPU time. Other applications (the app store app comes to mind) require the back button to be hit once for every page you've jumped to since opening the application in the first place. Sometimes it just seems easier to just pop back to the desktop and use the task manager to quit the program

(which warns of a risk of errors for doing so). To me it's a counter-intuitive and inefficient methodology in what otherwise seems rather well-designed, and a standardized "quit" button would be welcome. Perhaps it's in or coming to a future update, or I just haven't learned the better way yet.

For any complaints I might have, the tablet is a technological marvel, especially for what amount to a fancy toy for many. To give an example, the device can be set so it won't shut off if you are simply looking at it. It does this by using the built-in camera to tell if your eyes are pointed in its direction. I look at stuff like that and think "holy crap we're living in the future!" It reminds me of years and years ago when I had my first Palm PDA, and found out you could transfer files to other devices by pointing them at each other (for several seconds), which provoked a similar feeling. Using bulky computers with keyboards and mice and wires seems pretty archaic when compared to what is essentially a working representation of those little info pads everyone passed around in the various Star Trek series. It probably won't be much longer before the line separating "smart" devices and "real" computers blurs out completely, as the phones and tablets get more powerful (mine already gives any other computer in my home a run for its money specs-wise) and the bigger machines take on more and more operating system paradigms from the small devices (for better or worse).

It's interesting to look back on all the things various Amiga incarnations tried (and failed) to be the ground floor on, such as TV set-top media devices and operating systems that provide the same user experience on a phone as on a desktop computer, which seem almost prophetic now,

even if they looked more undesirable or crackpot-like then. Kinda tough to start a new tech trend if your name isn't "Apple," then or now.

...by Eric Schwartz
from the AmiTech Gazette
January 2013

Gaia To Reveal True Nature of Our Galaxy

Our solar system is positioned near the edge of the Milky Way. It's a nice part of town, sure, but it doesn't allow for a very clear view of the rest of the galaxy. That's prevented us from studying many of the Milky Way's fundamental aspects, like whether it has two arms or four, how big it is, how fast it's moving, and whether we're someday going to ram headfirst into the Andromeda galaxy.

However, the Gaia project is about spend five years mapping the whole of the Milky Way, answering our most basic questions about its evolution and structure. "It's going to be phenomenal," says astronomer Barry F. Madore of the Carnegie Observatories in Pasadena, Ca. "It will change everything."

Developed by the European Space Agency, and currently being built by EADS Astrium SAS, the €700 million Gaia spacecraft is just the second such satellite dedicated to astrometry to be put in orbit. Astrometry itself has been

practiced for centuries, but the accuracy of ground-based telescopes is limited by atmospheric turbulence. To date, we know the distance to fewer than 1000 stars with a precision of 1 percent. But with the Gaia, researchers estimate they'll be able to measure more than 10 million stars with the same fidelity. As mission scientist Timo Prusti quipped to IEEE, "It's going to really be a sledgehammer in fundamental astronomy."

The Gaia will launch later this year from Kourou, French Guiana and enter into orbit at Lagrange 2 (L2), some 932,000 miles (1.5 million km) from earth from Earth, always facing away from the Sun. This position not only guarantees that the observation platform will always have a view unobstructed by the Sun, Earth, or moon, it will continually expose the craft's solar panel "skirt" to its power source.

Gaia is expected to process nearly 8000 star positions per second over the course of its five-year mission. In all, the positions and velocities of more than a billion stars will be mapped. No, literally, the Gaia project will create an incredibly accurate three-dimensional map of more than a thousand million galactic stars by the time it's through. What's more, while the spacecraft is mapping stellar positions, it's also studying the composition of each star it sees, generating a massive new data set for astronomers to utilize.

The Gaia spacecraft itself measures about 11 meters wide (36 feet), weighs 2030 kg (2.2 tons), and uses a two-module design with propulsion, avionics, and communications devices stored in

the service module while the crafts' pair of optical telescopes reside in the payload module under a "thermal tent." Each telescope will focus incoming light onto a shared 106 CCD array, 4500 x 1966 pixels in size. This array is split into three areas, each associated with the three primary goals of the survey: measuring a star's position, chemical composition, and velocity.

These telescopes offer unparalleled precision down to magnitude 20 (that's 400,000 times fainter than what your naked eye can see) which will allow researchers to spot the numerous brown dwarves, distant supernovae, and other super-faint celestial occurrences. At magnitude 15, the craft will measure stars with an accuracy of 24 microarcseconds—roughly the width of a human hair if viewed from 1000 km away or the size of your thumbnails on the moon as seen from the Earth. That's so precise that the distance nearby galaxies will be measured with 0.001-percent accuracy and those as far as 30,000 light-years will be measured with 20-percent accuracy.

All of the data that the array collects is transmitted to the ESA's most sensitive ground stations in Cebreros, Spain, and New Norcia, Australia over the course of eight hours every day at the surprisingly quick throughput of 5 Mbit/s. At that rate, it's only a matter of time before the secrets of the Milky Way are revealed to us in full.

...by Andrew Tarantola
<http://gizmodo.com/5972682/how-the-gaia-spacecraft-will-reveal-the-true-nature-of-our-galaxy>

February Calendar

February 4 — Amiga-By-The-Loop Chapter
7:30 PM — Main Grand Prairie Library
901 Conover Drive, Grand Prairie

February 4 — Board of Director's Meeting
Approximately 9:15 PM — Location TBD

February 25 — Newsletter Deadline — 8:00 AM

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