# Nov. 18th

#### **Lorinda Cherry**

#### **Born: Nov. 18, 1944**; USA

Died: Feb. 2022

Cherry was an early member of the UNIX team [Oct 15] at Bell Labs, where she helped developed mathematical tools (such as the dc calculator and its bc preprocessor) and contributed to utilities for text formatting (troff [Dec 10], ntroff, and eqn [Jan 1]).

Cherry was involved in the development of the Writer's Workbench (wwb) for analyzing writing style. Development was led by Bell psycholinguist Nina Macdonald , and the pair presented the software on TV twice.

She was one of three coinventors named on AT&T's patent on a "Method and system for verifying the status of 911 emergency telephone services". For UNIX v6 and v7 Cherry prepared a pocket reference, familiarly known as the "Purple Card."

Before joining Bell, she worked for a few years as a FORTRAN programmer, but found it "very boring".

Cherry joined the Northern New Jersey Region chapter of the Sports Car Club of America (SCCA) in July 1967. She raced cars, and served as a marshal.

As a dog trainer, she authored a series of papers on using statistical analysis to evaluate the unconscious bias of dog show judges toward certain characteristics or breeds.

## Paul V. Mockapetris

Born: Nov. 18, 1948; Boston Massachusetts

Until the early 1980's, ARPANET [July 29] machine addresses were held in a single (ever growing) table, that was getting ever harder to manage. To request a name and address required a phone call during business hours to Elizabeth Feinler [March 2] at SRI's Network Information Center (NIC).

Jon Postel [Aug 6], who had set the system up, asked Mockapetris to select a compromise between five proposals for automating it. Mockapetris preferred to create his own, the Domain Name System (DNS).



Paul Mockapetris (2013). Photo by Jordiipa. CC BY-SA 3.0.

DNS delegates the responsibility of assigning names and addresses to domain-specific name servers, and if the load is too much, it's possible for the name server to delegate jobs to sub-domains servers. This approach creates a distributed and fault tolerant tree hierarchy of servers rather than a single large central database. It also meant that Feinler was soon to be unemployed.

The Internet Engineering Task Force (ITEF) published the DNS specification in RFC 881, 882, and 883 [April 7] in Nov. 1983.

BIND (Berkeley Internet Name Domain) is the most commonly used DNS software [July 8], and was developed as a graduate student project at Berkeley by Mark Painter, David Riggle, Douglas Terry, and Songnian Zhou.

Mockapetris later commented, "A friend of mine said I was

smart enough to invent the DNS, but not smart enough to own it"

### Gates Hired Nov. 18, 1970

When Bill Gates [Oct 28] was in eighth grade (1968) at Lakeside school, the Mothers' Club used the proceeds from a rummage sale to buy a Teletype Model 33 ASR terminal [April 00] and a block of time on a DEC PDP-10 owned by General Electric. Gates began to take an interest in programming, and his first large BASIC program [May 1] was an implementation of tic-tac-toe [Aug 25].

After the Mothers' Club money ran out, he and other students sought time on other systems. One of them was a PDP-10 belonging to Computer Center Corporation (CCC), which at one point banned Gates, Paul Allen [Jan 21], Ric Weiland, and Kent Evans after it caught them exploiting bugs in the OS to obtain free programming time. CCC went out of business in 1970.

On this day, Information Sciences, Inc. (ISI) hired the four (now calling themselves the "Lakeside Programmers Group") to write a payroll program in COBOL [April 8]. Later, in his senior year, Gates was hired out by ISI to help TRW (an aerospace company) set up a dispatching system at the Bonneville Power station in Washington State. "It was kind of scary," Gates later admitted. "This thing needs to work."

Perhaps fortunately for Washington State, Gates was supervised by John Norton, who had worked on the Apollo programme [Aug 25]. Gates has said that Norton taught him as much about programming as almost anyone he'd met: "my whole programming skill during the year I was there went a whole notch up."

Lakeside school also asked Gates to write scheduling software for classes. He later confessed that he finessed the code so he was placed in classes with "a disproportionate number of interesting girls."

Gates and Allen's next big project was Traf-O-Data [July 00].

## Tandem Computers Nov. 18th, 1974

Tandem Computers was incorporated by James Treybig (pronounced TRAY-big), John Loustanou, James Katzman and Michael Green.

While Treybig had been running a marketing team in Hewlett Packard's computer division, he noticed that the market for fault tolerance in online transaction processing (OLTP) systems was burgeoning. He mentioned the need for such systems to HP, but they were uninterested.

Tandem soon became the dominant manufacturer of faulttolerant machines. Its first was the Tandem/16 (T/16) released in May 1976, which was later rebranded the NonStop I. It could utilize between two and 16 CPUs, organized in a faulttolerant cluster. Each CPU had its own memory, I/O processor, and bus. If one processor failed, its work would be transferred to the others.

Tandem was ahead of its time in terms of the facilities it offered to its employees; these included jogging paths in the company's grounds, a swimming pool, yoga classes, day care, and male beauty contests. The management manual noted, "You never have the right to screw a person or mistreat them."

# Microsoft can Sell BASIC

#### Nov. 18, 1977

#### Prev: [April 20]

A federal court ruled that Microsoft was within its rights to

market its BASIC to companies other than MITS [Dec 19]. Micro-soft (as it was then called) had started life by developing Altair BASIC [Jan 2] for MITS, and then had branched out. If the ruling had gone the other way, Micro-soft would probably have ceased to exist soon afterwards.

Altair BASIC quickly became BASIC-80 for the 8080/85 [April 18] and Z80 chips [March 9], BASIC-68 for the 6800 [March 7], BASIC-69 for the 6809, MOS Technology 6502-BASIC [Sept 16], as well as the 16-bit BASIC-86 for the 8086/88 [June 18]. BASIC-80 was also known as MBASIC.

Microsoft's BASICs became a lucrative business, with ports for most of the personal computers of the 1970's and 1980's. Unlike Altair BASIC, most of Microsoft's other BASICs were resident in ROM, and so available on the machines at power-on in the form of a "READY." prompt. Hence, Microsoft became a very visible part of the user interface of many computers. This gave them a degree of brand recognition that was hard for others to beat.

### Epson HX-20 Nov. 18, 1981

The Epson HX-20 (aka HC-20) was developed by Yukio Yokozawa at Seiko Epson, and introduced at COMDEX in Las Vegas. Today most people call it the first laptop.



Epson HX-20. Photo by Steven Stengel. CC BY-SA 3.0.

It was about the size of an A4 notebook and weighed 1.6 kg. This included a full-size keyboard, an LCD screen, a small built-in printer, a tape storage device, and rechargeable batteries. It came with a RS-232C port, a serial port, and an external acoustic coupler as an extra.

Although the HX-20 was the first, it wasn't that popular, perhaps because of the lack of software and accessories. Also, its display was inferior to its main competitor, the TRS-80 Model 100 [March 29], although it was one of the largest LCD screens of the time.

## Bank Street Writer Nov. 18-21, 1982

Bank Street Writer (BSW) was a word processor for the Apple II [June 5], and other early PCs, published by Brøderbund [Feb 25]. It notably displayed its text in graphics mode so it more closely resembled the printed output than other word processors on the market.

The story goes that Jeff Nilson and Gene Kuzmiak designed BSW's interface on paper napkins over lunch at a local Chinese restaurant. Over Christmas 1980, Kuzmiak coded up a prototype in 6502 assembler, which was taken over and extended by Bank Street College in NYC (which explains the name).

The schools version of BSW was published by Scholastic in 1981, and included a series of helpful workbooks and other teaching materials. At one point during the 1980's it was estimated to be used in close to 80% of elementary schools.

Brøderbund released a home version on this day (at Applefest in San Francisco), which also became popular, but didn't contain the school materials.

### **Ricochet Begins**

#### Nov. 18, 1994

Ricochet was a pioneering wireless US Internet access services developed by David M. Elliott and Paul Baran [April 29].

The service began in Cupertino, and was deployed right across the San Francisco Bay Area by 1996 by utilizing wireless repeaters mounted on street lamps.

At its height, in early 2001, Ricochet was available in numerous US cities, and had over 51,000 subscribers. But in July 2001, the company filed for bankruptcy, a victim of the dotcom bust [March 10].

# Cynosure Wire Fraud

#### Nov. 18, 1994

Arguments began in the case of US vs. David LaMacchia, who was being prosecuted for allegedly operating the "Cynosure" BBS on MIT servers for hosting pirated software.

One rather significant legal problem was that LaMacchia couldn't be charged under current copyright law because he hadn't profited from his actions. Nevertheless, the cunning legal brains in the Department of Justice unearthed a 1952 federal wire fraud statute which prevented the use of telephone systems for interstate fraud. The court was unimpressed, and the case was dismissed on Dec. 29.

This spurred the government's legislators to close the gaps in the existing laws.

### Dance Dance Revolution Nov. 18, 1998

Konami released Dance Dance Revolution (DDR), the first dance-based arcade game. Players stand on a "dance platform" and stamp on colored arrows with their feet. The idea is to select an arrow based on musical and visual cues. Konami offers a large lineup of Rhythm Games under its BEMANI brand name (short for beatmania).



The lefthand dance platform of a Dance Dance Revolution Extreme arcade game. Photo by AeronPrometheus. CC BY-SA 4.0.

In Jan. 2006, Konami announced that West Virginia public schools would deploy DDR in its 765 educational institutions in its fight against childhood obesity. One person had found that including DDR in her day-to-day exercise regime resulted in a loss of 95 pounds (43 kg).

DDR also appears in the Guinness World Records under "Longest Dance Dance Revolution Marathon": 16 hours, 18 minutes, and nine seconds, held by Alex Skudlarek.

Another popular machine in the series is GuitarFreaks, the first guitar-based arcade game [Feb 16].

## First Blu-ray Disc Nov. 18, 2005

Sony announced the first Blu-ray Disc to contain a full highdefinition (1920 x 1080) feature film. The movie chosen for this honor was "Charlie's Angels: Full Throttle".

Sony Pictures Home Entertainment president Benjamin S. Feingold said, "We are confident this achievement will help everyone understand that Blu-ray is real and poised to enter the marketplace."

The main competition was from the HD DVD optical disc standard, and the eventual winner was uncertain until Sony's decided to incorporate a Blu-ray Disc player into its PlayStation 3 [Nov 11].

#### Albert HUBO Nov. 18-19, 2005

At the APEC Summit in Seoul, KAIST (Korea Advanced Institute of Science and Technology) and Hanson Robotics (HRI) released the "Albert Einstein Hubo", a lifesize walking bi-pedal robot with an animatronic head looking not unlike Albert Einstein [Jan 26; March 14]. It was based on the KHR-3 HUBO [June 5] developed by Joon Ho Oh, and was able to speak, and make over 30 facial expressions.

Albert followed on from HRI's Philip K. Dick head [June 19; June 25], which made its debut at *Wired* magazine's NextFest back in June.

## Wii U launched Nov. 18, 2012

Nintendo's Wii U was the successor to the Wii [Nov 19], and intended to compete against Sony's PlayStation 4 [Nov 15] and Microsoft's Xbox One [Nov 22].

The system's primary controller was the Wii U GamePad, which featured an embedded touchscreen.

Although it was backward compatible with earlier Wii software and accessories, the Wii U didn't have a strong library of its own titles. That, combined with limited thirdparty support, caused the Wii U to become the worst-selling home console in Nintendo's history [Sept 23].

It was replaced by the much more successful Nintendo Switch [March 3]. E