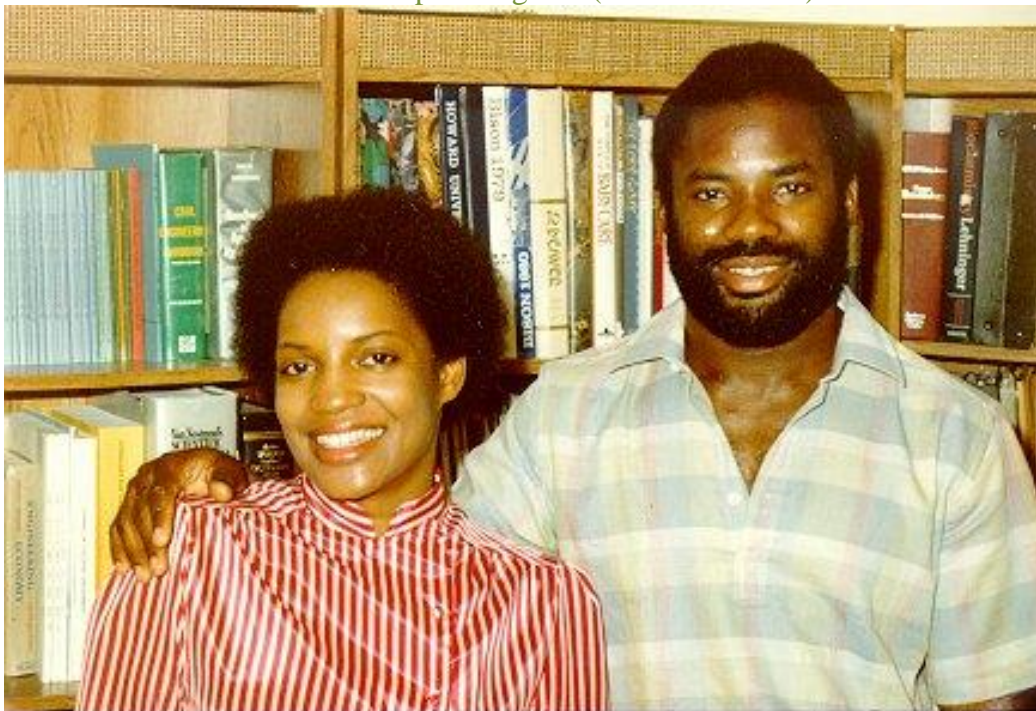




Dale and Philip Emeagwali (December 1983)



A peek into the old diaries and research notebooks of Philip Emeagwali that pertains to the internet.

In the decade of the 1980s, Philip Emeagwali was the only full-time programmer of an ensemble of up to 65,000 computers that communicated via computer-to-computer email, or as an internet. Below are pages from the old diaries and research notebooks of Philip Emeagwali that pertains to the internet and that, in part, explain why books on the history of the internet describes him as “one of the fathers of the Internet.”

~~How I sent my questions~~
 I visualized Human Messengers

Each computer had its ~~unique~~ email address that was a ^{non-decimal} unique string str. of sixteen zeroes and ones. In the ensemble of 65,536 two-to-power sixteen, or 65,536, computers, each computer knows its ^{sixteen} brothers by their ^{is dist-} common Last name. That is, their first name differ in only one bit, out of their sixteen-bit name.

human-messengers_1

PRESERVING PROXIMITY.

I sent the ~~questions~~ in problems to so that
for questions that originally from one

Nigeria has Cameroon, Chad, Togo, and
the Atlantic Ocean as neighbors. Then
Nigeria's ~~is~~ sixteen-bit address will
differ in one-bit position from its
four neighboring countries and ocean.

The same holds for all ~~countries~~ and
~~oceans~~ rivers, lakes, oceans, and
mountains.

human-messengers-2

I named the computers recursively, not randomly. I began with two ~~sets~~ ~~equal~~ ~~identical~~ ~~sets~~ ensembles with the same number of computers with identical names. I ~~append~~ for example, my ~~two~~ ~~two~~ ^{each} ~~two~~ ensembles of 32 computers ~~that~~ ^{were named by} 32 ~~first-bit~~ ^{is} ~~names~~ unique strings of zeros and ones. I appended "zero" as the first name of every 32 computers in the first ensemble. And I append "one" as the first name of every 32 computers in the second ensemble. Those two sets are brother because they have different first names but same last name.

human-messengers-03

On the 50th anniversary of the computer, we salute the brilliant pioneers behind this modern miracle

Just fifty years ago, the world's first electronic computer was unveiled. This remarkable invention has changed our lives faster than any other invention in history. Moreover, the rate of change is accelerating.

The women and men of EDS salute those whose insights, vision and persistence have contributed to developing this remarkable tool.

A leader among them is Dr. Philip Emeagwali. Emeagwali is an interdisciplinary computer scientist and inventor who developed software that allowed multiple processors to tackle complex problems simultaneously, paving the way to solving problems once thought unsolvable.

Inspired by the complex designs of nature, Emeagwali used geometry to prove that bees use the most efficient method possible to construct their honeycombs. He reasoned that a computer

based on the honeycomb design could improve efficiency. It did. His design breakthrough allowed 65,000 processors working together to perform the world's fastest computation at 3.1 billion calculations per second.

That was three times the speed of the fastest supercomputers of the day – at one-fifth the cost.

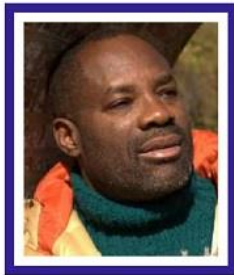


Dr. Philip Emeagwali

Today, he is pushing the limits of computing and networking even further. Dr. Emeagwali's inventions have helped improve yields from oil reservoirs as well as the accuracy of weather forecasting.

He is also working on developing supercomputers powerful enough to simulate weather trends over a century to investigate atmospheric warming.

EDS applauds Dr. Emeagwali and all those who are harnessing the power of information to improve life for millions. Without their work, we couldn't do ours.



Date: 10/28/2007, 4:56 am, GMT +6
Name: Chris Okoli <76.185.205.147>
Location: Dallas TX
Number: 220

I am so proud of what you have done for African Continent, and I urge you to continue to do more. God will continue to see you through in all your endeavors.

Chris Okoli.
Financial Adviser
972 697 6013. Cell Phone.

Date: 10/21/2007, 7:10 pm,
GMT +6

Name: Raphael
Bhembe <168.210.90.181>

Location: S

Number: 219

Thank you for being an African
hero. Please consider
tourinf Swaziland to promote
Science and Technology

Date: 10/17/2007, 7:28 pm,
GMT +6

Name: Ezra <196.11.134.77>

Location: Johannesburg-
South Africa

Number: 218

Dear Prof.. You're a blessing..
and thanks for making me
proud to be an African. I hope
and pray that most black kids
can know about ur
achievement, especially in
Southern Africa.

Thank you.

Date: 10/14/2007, 3:01 am,
GMT +6

Name: Anaekwe Ogonna
Jnr <80.255.41.170>

Location: Lagos, Nigeria.

Number: 217

Dear Prof. Emeagwali,
I am exceedingly happy that a
man of Igbo extraction is
making waves all over the
globe. You are a blessing to the
world.

Date: 10/13/2007, 7:58 pm,
GMT +6

Name: Dr.Clifford C.
Wokocha <80.240.220.38>

Location: moscow

Number: 216

Your achievements are a great inspiration to generations yet unborn. Nigeria, Africa indeed the world has a genius, whose success has a multiplier effect to all, who care. May the Almighty God, continue to inspire you to even

greater, unexplored areas of human knowledge.

Date: 10/13/2007, 4:19 pm,
GMT +6

Name: Clinton
Anokam <208.78.62.81>

Location: Nigeria, Kaduna

Number: 215

With your achievement on Earth
and of importance to Humanity
.What have been your challenges

Date: 10/10/2007, 3:28 pm, GMT +6

Name: Philip NG.
Ifechukwude <88.202.35.150>
Location: Ibusa, Nigeria
Number: 214

Philip Emegwalim is one of the best thing to happen to Nigeria of this generation.

Date: 10/10/2007, 3:20 am,
GMT +6
Name: Henry
Omoriegie <196.3.61.4>
Location: Port Harcourt
Number: 213

OUR DEAR PHILLIP,
IT IS WITH PROUD TAPS ON
MY KEYBOARD THAT I
MAKE THESE ASSERTIONS:
THAT NIGERIA, NAY
AFRICA OWES YOU
APLENTY FOR YOUR
SINGULAR, MILLENIAL
ACHIEVEMENTS. YOU DID
NOT CARVE A NICHE FOR
JUST NIGERIA BUT THE
ENTIRE THIRD WORLD. THE
ALMIGHTY HAS GIVEN YOU
THE TALENT TO ENHANCE

THE ENDEAVORS OF MANKIND

Date: 10/9/2007, 12:44 am,
GMT +6

Name: Hon. Kelechi Ansel-
Oliaku <91.152.183.208>

Location: Finland

Number: 212

Dearest Prof. You are in no doubt one of the worlds prominent inventors, innovator, accomplisher and to say the least, a moving scientific encyclopadia. You have

however carved a place for yourself in the annals of world history, but remember to whom much is given much is expected, whether you like it or not, you owe it as a duty to the society that gave you life to create more Emeagwalis. My brother, for a person of your calibre to remain in another man's country for more than two centuries is not a credit. Come home and help develop the Igbo land, on that posterity will write your name in gold "Obu aku lue uno, oburu ezigbo aku"

