

STATEMENT OF PURPOSE:

Oghenetega Gabriel Jeroh

My technical interests include Cryptography, Network Security, Secure Software Development and the social implications of computers. I have decided to major in Secure Software Development during my postgraduate studies.

Computers have become indispensable because of their increasing power and versatility. Unfortunately, as computer use becomes more widespread, so do the opportunities for misuse. Computer hackers often violate privacy and can tamper with or destroy records. Programs called viruses or worms can replicate and spread from computer to computer, erasing information or causing malfunctions. Other individuals have used computers to electronically embezzle funds and alter credit histories. The biggest surprise was the change in the threat model. We always knew there could be profit-based attacks, but no one anticipated the current alliance between hackers and other sorts of criminals, such as spammers, credit-card thieves, stock fraud artists, and so on. This, combined with the woeful security level of most desktop machines has created a vast profit motive for computer crime. Individuals, companies, and governments are working to solve these problems through informed conversation, compromise, better computer security, and regulatory legislation. Vendors started developing more robust products when they suddenly realized that it is better and cheaper to get rid of security holes during product development than to deal with the public relations mess and patches after the fact. Nowhere was this more evident than in Bill Gates's memo in January 2002, announcing Microsoft's Trustworthy Computing initiative. He declared "Trustworthy Computing is the highest priority for all the work we are doing," adding "so now, when we face a choice between adding features and resolving security issues, we need to choose security." Microsoft has decided to resolve this by educating its developers and changing its software development practices. Given the growing interest in trustworthy software and recent efforts to develop secure coding standards and practices, there is therefore a stringent call for research in the area of secure software development as we may possibly see a breakthrough in secure coding. All hands should be on deck because in the no distant future, we could see actual tools for attacking automobiles, robots, implants, remote surgeries, or energy systems instead of just Web sites, servers, and Personal Computers; this might be imminent crisis for the world at large.

Within the last two years, my interest and enthusiasm for research work have continued to grow progressively. It has become my habit to spend at least eight hours each day surfing the internet for challenges, brainstorming and drawing up new algorithms for solving these problems. The development, implementation and testing of profitable trading and Expert systems for making financial decisions in the foreign currency market have been my research focus within this period. These systems involve using fundamental and technical analysis tools to predict the market direction either in the short term or at times in the long term. The technical analysis tools include indicators displayed on charts, whose origin are based on advanced mathematical calculations such as Fibonacci retracement, Oscillators, Moving Average, Pivot, Resistance and Support regions. With the help of my C and C++ programming skills and the Meta Trader 4 inbuilt compiler, I was able to write the source codes for several Expert Advisors, Custom indicators and script for different trading systems which I developed. The Expert

Advisors (Robot) makes automated trading deals on live streaming data feeds using knowledge and analytical rules defined by my trading logic. Although progressive work is still on as I encounter new challenges daily, I intend to commercialize the product after satisfactory result has been ascertained.

A thought which I am currently involved in and sourcing for adequate information and concrete facts to draw up a proposal to the Nigerian government is, “The Software Network Management, Billing and Secure distribution of Electrical power to both residential and industrial consumers”. The Nigerian federal government has invested so much in the generation, transmission and distribution of electricity but due to its inability to effectively manage the finance and very large customer base, had to privatize a sector to the Power Holding Company of Nigeria (PHCN). Some of the major challenges that the power distribution network is facing are customer’s database management, precision billing and secure access. Attempts were made to solve the precision billing problems by introducing a pre-paid energy meter but desperate customers frustrated this positive gesture by short-circuiting the meter to get free access to the electrical energy. I therefore intend to develop a mechanism of software that will deny un-authorized customers access to the distribution network.

The pursuit of knowledge has always been my obsession and the propelling force behind all my achievements. My decision to pursue a PhD degree blends harmoniously with my eventual objective of taking up the highest ranking position at a research university while still having an authority in my area of interest. Though it helps me to become a member of the academic community, the postgraduate experiences also enhances my critical thinking, sharpens my analytical mind, refine my knowledge of research methodology and writing skills; and gives me a license to conduct research in my area of interest. There exist synergy between the MAP-i special theme for 2008/2009 “Security and Information Society” and my research interest so I suppose that a postgraduate study at your University will be the most logical extension of my academic pursuits and a major step towards fulfilling my aspirations.

I am very convinced that my undergraduate study has equipped me with the required basic knowledge in Computing, Mathematics and Electronics to excel in the PhD programme in Computer Science. My quest for in-depth knowledge for computer internetworking and security has motivated my self sponsored development certification courses in Cisco Certified Network Administration (CCNA) and Security Professional (CCSP). I also availed myself of the company’s sponsored online multimedia tutors developed by Skill Port and NETg to undertake intensive training in Software Development Practices, Fundamentals of Programming, A+ certification, C++ and Java programming languages. Attached is my resume with relevant teaching and Information Technology work experience.

I will be grateful to you if I am accorded the opportunity to pursue my graduate studies with MAP-i grant at your institution and if my academic potential, strong commitment to research and a persistence quest for knowledge will be worthy of your serious consideration in the selection of a suitable candidate.

OGHENETEGA GABRIEL JEROH

Email: tegaingraduateschool@yahoo.com

Mobile: +2348035061640

Date of review: 29 April 2008

No 12 Udu market road,
Jeroh Petrol Station,
Warri-Delta State, Nigeria.

SUMMARY:

Two years research experience in the development and testing of Expert Systems.
Four years professional experience in computer and voice transmission network management.

PROFESSIONAL SKILLS:

Programming Languages: MQL, C, C++, and Java.

Platforms: Windows 98/NT/2000/XP/Vista and UNIX

IT CERTIFICATIONS:

Cisco Certified Network Associate (CCNA), 91%, December 2006

AutoCAD Designs, Upper Credit, September 2000

PROFESSIONAL TRAINING:

Cisco Certified Security Professional (CCSP)

A++ Certification

Software Programming Fundamentals

Software Programming Best Practices

C++ and Java programming languages

EDUCATION:

Bachelor of engineering (B.Eng) in Electrical/Electronics Engineering, Federal University of Technology, Akure (FUTA), Nigeria, 2001-05

Ordinary National Diploma (OND) in Electrical/Electronics Engineering, Petroleum Training Institute (PTI), Nigeria, 1998-2000

TEACHING EXPERIENCE:

Foreign currency Exchange tutor, 2008-date

HIV/AIDS peer-educator during National Youth Service Corps (NYSC), 2006-07

Secondary School Mathematics and Physics teacher during NYSC, 2006-07

Undergraduate tutorship for second and third year courses, 2001-03

Computer application Instructor during Internship, 2000-01

RESEARCH EXPERIENCE:

The development, implementation and testing of profitable trading and Expert systems for making financial decisions in the foreign currency market, 2006-Date

The Software Network Management, Billing and Secure distribution of Electrical power to both residential and industrial consumers, 2008-Date

WORK EXPERIENCE:

Telecoms Engineer, RANC Ltd. (Shell Petroleum Telecom Vendor), Warri, Nigeria, 2004-date:

- Installation, Configuration, Operation and Maintenance of CDMA/GMR Satellite and PDH/SDH terrestrial Radio Access Network and Multiplexers:
- Optimization and Network Management of Shell LAN/WLAN/MAN/WAN Data-Voice Network
- Digital Satellite Television (DSTV) Network Monitor
- Experience interacting with telecom carriers (MTN/Celtel/Glo) and other business partners

Network Engineer (Internship), XCEL International Computer, Warri, Nigeria, 2000-01:

- Computer Hardware and Software Engineering and Networking.
- Proficiency in Microsoft Word, PowerPoint and Excel.
- Cloning, repairs and after sale maintenance of computer system unit, monitors, printers, photocopiers and scanners.
- Operation of 7KVA Generator.

TECHNICAL WRITE UP AND PRESENTATION:

Student Industrial Work Scheme (SIWES) Internship report.

Seminar Presentation and Report write up on The Efficient use of Transmission media in Telecommunication Infrastructure.

Seminar Presentation and Report write up on The Reliability and Efficiency of Obanla Rural Power Distribution Network.

EXTRACURRICULAR ACTIVITIES:

I spend my leisure time having motivational chat with friends and relatives, playing video games, chess and scrabble games. I spend a lot of time surfing the internet, watching documentaries, current affairs and watching movies. I will not forget my regular commitment and devotions I give to my religious activities. I rarely go out for swimming and foot balling.

ENGLISH PROFICIENCY:

English Language happens to be the official language of my country Nigeria. It is the official medium of instruction at all levels of education and the medium for communication in the workplace. I do not have any problem with undertaking my postgraduate programme in English language because I am proficient in both spoken and written English.

| COURSE CODES | COURSE TITLE | GRADE | POINTS | CREDIT UNIT |
|---------------------|------------------------------------|--------------|---------------|--------------------|
| MEE 201 | Manufacturing Technology I | 51C | 3 | 2 |
| MEE 207 | Applied Mechanics | 47D | 2 | 3 |
| EEE 281 | Basic Electrical Engineering I | 50C | 3 | 3 |
| IMC 241 | Basic Computer Programming I | 51C | 3 | 3 |
| GNS 203 | Nigerian People and Culture | 57C | 3 | 2 |
| MNE 203 | Engineer in Society | 53C | 4 | 1 |
| MME 201 | Science of Materials | 44E | 1 | 3 |
| CHE 205 | Physical Chemistry | 41E | 1 | 2 |
| CRP 201 | General Agricultural Theory | 71A | 5 | 1 |
| IMC 201 | Mathematical Methods I | 41E | 1 | 3 |
| CVE 202 | Strength of Material I | 63B | 4 | 3 |
| MEE 202 | Engineering Drawing II | 52C | 3 | 3 |
| MEE 206 | Basic Thermodynamics | 45D | 2 | 3 |
| EEE 282 | Basic Electrical Engineering II | 58C | 3 | 3 |
| IMC 202 | Introduction to Numerical Analysis | 62B | 4 | 3 |
| IMC 242 | Basic Computer Programming II | 62B | 4 | 3 |
| AGE 204 | Basic Fluid Mechanics | 60B | 4 | 2 |
| CRP 210 | Practical Agriculture | 40E | 1 | 2 |
| GNS 104 | Information Retrieval (Library) | 53C | 3 | 1 |
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200 LEVEL (1ST YEAR) Direct Entry

500 LEVEL (4TH YEAR)

| COURSE CODES | COURSE TITLE | GRADE | POINTS | CREDIT UNIT |
|---------------------|--|--------------|---------------|--------------------|
| EEE 511 | Control Engineering | 68B | 4 | 3 |
| EEE 555 | Electrical Service Design | 52C | 3 | 2 |
| EEE 533 | Communication System | 50C | 3 | 3 |
| EEE 551 | Power Electronic and Devices | 48D | 2 | 3 |
| EEE 546 | Assembly Language | 58C | 3 | 3 |
| EEE 571 | Electric Engineering Project | | | 3 |
| MEE 501 | Engineering Economics and Accounting | 67B | 4 | 3 |
| MEE 502 | Engineering Law and Management | 57C | 3 | 3 |
| EEE 572 | Final Year Project | 67B | 4 | 3 |
| EEE 582 | Reliability and Maintainability of Systems | 57C | 3 | 2 |
| EEE 584 | Seminar Presentation | 67B | 4 | 2 |
| EEE 431 | Communication Principles | 43E | 1 | 3 |
| EEE 547 | System Programming | 56C | 3 | 3 |
| EEE 538 | Broadcasting | 46D | 2 | 3 |
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| | | | | |
| | | | | |
| | | | | |
| | | | | |

NAME: JEROH GABRIEL OGHENETEGA
 YEAR ADMITTED: 2000 MATRIC. NO: EEE/00/4740
 COURSE PURSUED: ELECTRICAL/ELECTRONICS ENGINEERING
 STATE OF ORIGIN: DELTA STATE
 SPONSOR: CHIEF E. O. JEROH
 DEGREE AWARDED: B. ENGINEERING
 DATE OF AWARD: DECEMBER 2005

| 1ST YEAR | | | 2ND YEAR | | | 3RD YEAR | | |
|----------|-------|--------|----------|-------|--------|----------|-------|--------|
| COURSE | GRADE | POINTS | COURSE | GRADE | POINTS | COURSE | GRADE | POINTS |
| | | | CHE 205 | 41E | 1 | EEE 311 | 75A | 5 |
| | | | CRP 201 | 71A | 5 | EEE 321 | 64B | 4 |
| | | | EEE 281 | 50C | 3 | EEE 341 | 51C | 3 |
| | | | GNS 203 | 57C | 3 | EEE 351 | 61B | 4 |
| | | | IMC 201 | 41E | 1 | EEE 361 | 64B | 4 |
| | | | IMC 241 | 51C | 3 | IMC 309 | 64B | 4 |
| | | | MEE 201 | 44E | 1 | EEE 322 | 53C | 3 |
| | | | MEE 207 | 47D | 2 | EEE 332 | 67B | 4 |
| | | | MME 201 | 51C | 3 | EEE 342 | 56C | 3 |
| | | | MNE 203 | 53C | 4 | EEE 352 | 41E | 1 |
| | | | AGE 204 | 60B | 4 | EEE 362 | 45D | 2 |
| | | | CRP 210 | 40E | 1 | GNS 202 | 56C | 3 |
| | | | CVE 202 | 63B | 4 | IMC 316 | 46D | 2 |
| | | | EEE 282 | 58C | 3 | | | |
| | | | GNS 104 | 53C | 3 | | | |
| | | | IMC 202 | 62B | 4 | | | |
| | | | IMC 242 | 62B | 1 | | | |
| | | | MEE 202 | 52C | 3 | | | |
| | | | MEE 206 | 45D | 2 | | | |

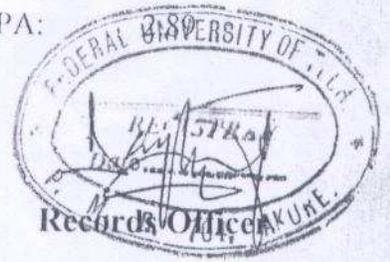
FEDERAL UNIVERSITY OF TECH. AKURE
 CERTIFIED TRUE COPY

[Signature] 27/1/06

RESULT: PASSED RESULT: PASSED RESULT: PASSED

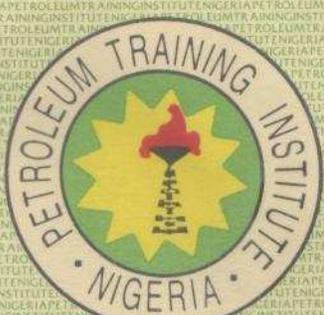
CGPA : KEYS TO GRADE CGPA: 2.79 CGPA:

| MARK% | GRADE | POINTS | DESCRIPTION |
|---------------|-------|--------|--------------|
| 70% and above | A | 5 | Very Good |
| 60-69% | B | 4 | Good |
| 50-59% | C | 3 | Average |
| 45-49% | D | 2 | Satisfactory |
| 40-44% | E | 1 | Weak |
| Belew 40% | F | 0 | Very Weak |



For Registrar

* Any alteration on this Transcript renders it invalid*



PETROLEUM TRAINING INSTITUTE EFFURUN, NIGERIA

This is to certify that

Gabriel Oghenetega Jeroh

*having completed the approved course of study and
passed the prescribed Examinations has, under the
Authority of the Academic Board, been awarded*

National Diploma

Electrical / Electronic Engineering Technology

Upper Credit

17th September 2000

DATE

No DA 1672

PRINCIPAL

REGISTRAR



06
A0010154

NATIONAL YOUTH SERVICE CORPS

Certificate of National Service

This is to Certify that

Jeroh Gabriel Oghe

ADS C BO/FUA/06/304885 has satisfactorily completed
national service from 14th Feb. 2006 to 13th Feb. 2007, in
with Section II of the National Youth Service Corps Decree No. 5
13th Feb. 2007.

Director-General
National Youth Service Corps



THE FEDERAL UNIVERSITY OF TECHNOLOGY, AKURE

REGISTRAR: Dr. (Mrs.) E.F. Oyebade MNIM, FSEA
B. Ed. M.Ed. Ph. D



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Telex:

Our Ref: FUTA/REG/AC/NOR/112

Date: 30th January, 2006

JEROH, OGHENETEGA GABRIEL
EEE/00/4740

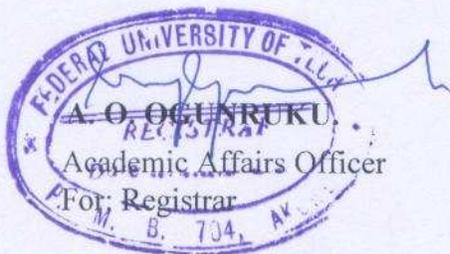
Federal University of Technology,
P. M. B. 704,
AKURE

NOTIFICATION OF RESULT: SUCCESS IN THE UNIVERSITY FINAL DEGREE EXAMINATIONS

I am pleased to inform you that as a result of your success in the Bachelor of Technology final degree examinations held in August, 2005. Senate has at its special meeting held on November 30, 2005 on the recommendations of the Board of Studies, School of engineering & engineering technology approved that you be awarded the Degree of BACHELOR OF ENGINEERING in ELECTRICAL & ELECTRONIC ENGINEERING with SECOND CLASS (HONS) LOWER DIVISION.

On behalf of the Senate of this University, kindly accept my warm congratulations.

The certificate however, will be ready for collection in due course.



FEDERAL REPUBLIC OF NIGERIA NATIONAL IDENTITY CARD



Surname **PUBJEROH**

First Name **GABRIEL**

Middle Name **OGHENETEGA**

Maiden Name

Date of Birth **01-05-1979** Height **182** Sex **M**

Occupation **STUDENT** Blood Group

Applicant's residence

Address **EKRESEHA QTRS**

Town/Village **ORHUWHORUN**

LGA **UDU**

State **DELTA**

Ward **009 PU**



UNION AND FAITH, JUSTICE AND COURAGE

Particulars of Next of Kin :

Surname **JEROH**
First Name **PETER**
Middle Name **OMAYUAI**
Address **EKRESEHA QIRS**

Applicant's Origin :

Place **ORHUWHORUN**
State **DELTA**

Date of ID Card Issue **07-07-2005**

Place **ABUJA (FCT)**

State LGA RC Seq Number ID Form Number

DT 18 057 00802160801 0607791318

Personal Number **DT080750530**



MAP- i Doctoral Programme in Computer Science Portugal

REFEREE FORM

The referee report provided by you helps us to evaluate the applicant's academic and intellectual capacity, and is an integral part of our admission decision process. Thank you.

Name of Applicant: Oghenetega Gabriel Jeroh

Referee's Name: Engineer Ovie Okor

Telephone No: +2348039602466

Address: The Shell Petroleum Development Company of Nigeria Limited (SPDC), Telecoms building, Industrial Area, Ogunu, Nigeria

Email Address: Ovie.okor@shell.com

Organization: The Shell Petroleum Development Company of Nigeria Limited

Designation: Senior Telecommunications Analyst

EVALUATION OF APPLICANT

1. How long have you known the applicant, and in what capacity?

I have known the applicant for over 3 years as a staff of RANC limited. RANC limited is a vendor to SPDC and they maintain the telecommunication facilities under my direct supervision.

2. Please appraise the candidate in terms of the qualities listed below, relative to the applicant's peers. Mark an 'X' in the appropriate boxes.

| | Average / Below | Good (Above Average) | Excellent | Outstanding |
|------------------------------------|-----------------|----------------------|-----------|-------------|
| Proficiency in English | | | X | |
| Enthusiasm and desire to learn | | | | X |
| Analytical Skills | | | | X |
| Verbal Skills | | | X | |
| Ability to adapt to new situations | | | | X |
| Self-Confidence | | | | X |
| Creative Qualities | | | | X |
| Leadership Potential | | | X | |
| Managerial Potential | | | X | |
| Initiative | | | | X |

3. Your assessment of applicant's potential/suitability to undertake PhD study in Computer Science.

It is with pleasure that I recommend Mr. Oghenetega for PhD programme at your university. I have known him as an innovative self-starter, who rarely needs supervision. He is punctual and typically exceeds expectations. He handles pressure well, and will voluntarily work overtime and take work home to meet a deadline. He has a strong desire to excel, sets high standards for himself and achieves them consistently. Mr. Oghenetega is a very sincere and diligent person with sufficient motivation to excel in his chosen field of studies. I wish him all the best and strongly recommend him for PhD study in your University with full financial aid. Please do not hesitate to contact me if you need any additional information.

4. Any other information which you think is relevant to our admission decision.

On a personal level Oghenetega is an ambitious person showing a lot of enthusiasm for research and development works. He has literally gotten me involved in his research for expert solutions to financial problems in online foreign currency market (forex) and has been able to develop some profitable systems which are currently under test on a demo account. His passion for research and successful result so far has motivated me to support him both technically and financially in his works as well as in his desire to further his academic career in his chosen field of studies. I have so much confidence in him and see a lot of potentials that will be unleashed if given the required enabling environment.

MAP- i Doctoral Programme in Computer Science
Portugal

I strongly recommend this applicant for PhD study in Computer Science.

Referee's Signature: _____

Date: 5th May 2008

Please this form should be sent directly to the email mapi@map.edu.pt from the recommender's official email before 5th May 2008. Paper recommendations will not be accepted.

**MAP- i Doctoral Programme in Computer Science
Portugal**

REFEREE FORM

The referee report provided by you helps us to evaluate the applicant's academic and intellectual capacity, and is an integral part of our admission decision process. Thank you.

Name of Applicant: Oghenetega Gabriel Jeroh
Referee's Name: Michael Adeniyi
Telephone No: +234 8064146471
Address: 5,Idugboe Estate, Off Elf Road, Ogonu – Warri. Delta State, Nigeria
Email Address: michael.adeniyi@ranclimited.com
Organization: Ranc Limited
Designation: Manager

EVALUATION OF APPLICANT

1. How long have you known the applicant, and in what capacity?

I have known the applicant for 3 years . He worked as a Computer and Radio Transmission engineer under my supervision for about two years.

2. Please appraise the candidate in terms of the qualities listed below, relative to the applicant's peers. Mark an 'X' in the appropriate boxes.

| | Average / Below | Good (Above Average) | Excellent | Outstanding |
|------------------------------------|-----------------|----------------------|-----------|-------------|
| Proficiency in English | | | X | |
| Enthusiasm and desire to learn | | | | X |
| Analytical Skills | | X | | |
| Verbal Skills | | X | | |
| Ability to adapt to new situations | | | X | |
| Self-Confidence | | | X | |
| Creative Qualities | | X | | |
| Leadership Potential | | X | | |
| Managerial Potential | | X | | |
| Initiative | | | X | |

3. Your assessment of applicant's potential/suitability to undertake PhD study in Computer Science.

Mr. Oghenetega Jeroh is a hard working and innovative man. He dedicated to duty and relates well with other co-workers.

4. Any other information which you think is relevant to our admission decision.

He is very eager to learn.

I strongly recommend this applicant for PhD study in Computer Science.

Referee's Signature: moadeniyi

Date: 03/05/2008

MAP- i Doctoral Programme in Computer Science
Portugal

Please this form should be sent directly to the email mapi@map.edu.pt from the recommender's official email before 5th May 2008. Paper recommendations will not be accepted.