CS 486 – Capstone Project

Memorandum

To:	Ernest Bowman-Cisneros (USGS)		
From:	Team Fugu: Erik Wilson, Nauman Qureshi, Thad Boyd, Ben Atkin		
CC:	Margaret Johnson (USGS), Eck Doerry (NAU)		
Date:	1/28/2004		
Re:	Team Inventory		

Introduction

The purpose of this memo is to provide you with an inventory of our team's talents, skills, and special interests in order to explore what our team's strengths and weaknesses are. The sections of this memo include: an introduction of the team members and roles, preliminary tasks assigned, and special talent deficiencies. Also attached are profiles for each of the team members followed by corresponding resumes.

Team Members and Roles

The members of *Team Fugu* and their associated roles are as follows:

- 1. Erik Wilson Team Leader / Organizer
- 2. Nauman Qureshi Documentation / Recorder
- 3. Thad Boyd Website Developer / Facilitator
- 4. Ben Atkin Communicator / Research

Preliminary Tasks Assigned

The following preliminary tasks have been assigned:

- **Entire Team**: Become familiarized with OpenBSD, this includes installing the operating system at home if possible and researching documentation on the web (the OS has already been installed on a Sparc64 workstation located at the CET which is dedicated to the project).
- Nauman Qureshi: Create a skeleton of the project notebook with relevant sections included.
- **Thad Boyd**: Begin creation of the team website which will be used to host project files and documentation (*located at http://www.cet.nau.edu/~fugu/*).
- **Ben Atkin:** Research uses of CVS repositories for project files and find useful sources of shell scripting guides related to OpenBSD.

Special Talent Deficiencies

Although our team has had experience with many Linux distributions none of us have used OpenBSD within a professional or educational setting. Additionally we are fairly inexperienced in the use of shell scripting which may be required for either modification of the OS installation or to create a patch update system. To compensate for our lack of OpenBSD experience we are reading the online documentation and becoming familiar with the OS by installing it at the college and at our homes. Additionally, Ben Atkin will research shell scripting as it relates to OpenBSD and provide details by February 2rd.





Upper Division Courses Taken:

- CSE 315: Automata Theory
- CSE 470: Intro to Intelligent Systems
- CSE 497: Independent Study (Interdisciplinary Research)
- CSE 386: Software Engineering
- CSE 499: Computer Networks
- CS 401: Ethics in Computer Science
- CS 421: Algorithms
- CS 455: Modeling Reactive Systems
- CS 480: Operating Systems
- CS 499: Unix Administration (Currently Enrolled)
- MAT 316: Intro to Linear Algebra

Work Experience:

- Currently working as Web Administrator for the College of Engineering and Technology.
- Familiar with software such as Apache, MySQL, and ht://Dig.

Special Skills:

- Proficient with Perl, especially Perl's regular expressions
- Intermediate Emacs user, I have been using it for the past several years.

Special Interests:

- Advocate of open source / free software.
- Have been using a Linux distribution at home since the mid-90s.
- I am currently investigating 64-bit operating systems for home consumption.

Comments:

I am excited to work on the OS Tools for OpenBSD project, I feel we will be able to contribute greatly to the USGS and hopefully our work will be used for several years to come.





Upper Division Courses Taken:

- CS 315: Automata Theory
- CS 400: Computer Architecture
- CS 401: Ethics in Computer Science
- CS 421: Algorithms
- CS 480: Operating Systems

Work Experience:

I have worked for the Northern Arizona University (NAU) computer labs. Mainly my job was to help out the users using the lab, this constituted helping them use various software tools, check to see if any hardware of the computer their using is not properly working, and to teach them a little bit of the basics of computer usage. I have been working for these labs for over a year now and am well comfortable with user level communication.

Special Skills:

- Worked mostly on projects using JAVA as the primary language. I do have a little experience on working in C/C++ and also vaguely familiar with maple.
- Worked mainly on Windows and just a little amount on Unix systems.
- Apart from technical capabilities, I do hold a quality of bonding well with fellow partners and classmates and enjoy learning new things from others.
- I am fond of participating in delivering presentations to different parties and societies.

Special Interests:

I hold a lot of interest in networking of computer systems. Getting involved in using different Operating Systems is one of my newly born interests. Last semester I took the course of Operating Systems (CS 480) and learnt a lot on how one works. Implementing new ideas into an already existing OS sounds like fun and I would be interested in it. I do hold great interests in providing a good documentation of reports/projects. I believe in a well-organized layout of the systems that I work on.





Upper Division Courses Taken:

- CS 315; Automata Theory
- CS 386: Design
- CS 396: Principles of Languages
- CS 421: Algorithms
- CS 455: Reactive Systems
- **CS 480**: Operating Systems
- CS 481: Compilers
- MAT 316: Linear Algebra
- MAT 318: Number Theory

Work Experience:

Worked for the Roosevelt School District, Phoenix, AZ, summer 2001. Mostly involved network maintenance tasks.

Special Skills:

- Open-source enthusiast, experience with multiple Linux distributions, especially BSDlike Slackware and Gentoo.
- Language enthusiast. Expect to complete linguistics minor in Fall '04. Should help with documentation.
- Web design knowledge. Nothing terribly fancy, but compliance with XHTML 1.1, CSS standards.

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Ben Atkin



Upper Division Courses Taken:

- **CSE 315**: Automata Theory
- CSE 386: Software Engineering
- CSE 396: Principles of Languages
- CS 421: Algorithms
- CS 455: Modeling/Reactive Systems
- CS 480: Operating Systems
- MAT 316: Intro to Linear Algebra

Work Experience:

- Website Design (HTML)
- Document Editing

Personal Interests:

- Programming Languages
- Hardware Design
- Graphical User Interfaces



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	Nauman Qureshi			
Objective	Obtain a position as Computer Scientist.			
Experienc	Support Technician 10213 N 55 th Street			
e	• Supported Windowsatadise NakayanaZotbedsoftware packages.			
	 Diagnosed hardware/soft@are135ue3 on personal computers. naumanpervez@hotmail.com Received special security access for user, server, and building administration. 			
Summary:	• (2000–2001; Information Technology - CET - NAU; Flagstaff, AZ) Aggressive, results-oriented individual seeking a challenging opportunity that will utilize my			
Summary.	skills, eaular statistic field individual seeking a chancing opportunity that will during in the skills, eaular statistic field and the seeking a chancing opportunity that will during in the second seeking a chanceling opportunity that will during in the second seeking a chanceling opportunity that will during in the second secon			
	learn fasteanedelizeures Elitspineering website (http://www.cet.nau.edu/).			
Skills:	• Utilized PERL, JavaScript, and databases to create dynamic content. Technical Skills			
Simis.	Operating stated sommercial server software to source public software.			
	Langua (2001 CPrestanta Infostmention Richtago Magjab, CESp - NAU; Flagstaff, AZ)			
	Applications – MS Office, MS Project, Logic Works, Maple, Minitab, Matlab			
	Software Engineer Personal Skills. Strong Control systems for wastewater management Strong Continunicator			
	Strong Control systems for wastewater management			
	Leader Created documentation forganizer ted Printinizee. Strategic			
	Tactical sed National Instrumentean all all aver for project the set of the s			
Courses:	• (2002: Wastewater Demonstration Project - CET - NAU; Flagstaff, AZ) Technical Writing Software Design Operating Systems			
	Digital Design Algorithm Design Computer Architecture			
F	• Developed simulation of wastewater using Javax/Swing orthern Arizona University (NAU) Computer Lab Technical Support			
0	 Managetente designation of the second seco			
	 Helped the students using the facility in the problems encountered by them 7) 			
	 Helped the students using the facility in the problems encountered by them. (Summer 2002, sponsored by Pr. Trotta - CE1 - NAU, Flagstaff, AZ) Troubleshooting Computers with defaults in them using different software and hardware 			
	skills. • De Nosth gran Arizonan II niversity of 2000-Bresen twifilaestatts as a s.			
Education				
08/02 - 01/03	 Continuing student (Senior), seeking degree in Computer Science. Kerr Cultural Theatre, Scottsdale AZ Computer Tech. Was the Computer Tech. at Kerr, mainly helped any problems encountered with the computers. 			
	• Using the tighting afterna to produce tights for shown			
References	 Using the ticketing software to produce tickets for shows. Helping the customers with satisfactory results. 			
	 Helping the customers with satisfactory results. Manager, Information Technology. Created a user-friendly forum for information and satisfaction. College of Engineering & Technology College of Engineering & Technology 			
Activities:	PO.Box 15600, Flagstaff AZ 86011-5600, President - Projekt N-Qore (Musical Band Promotion Company)			
Title incs.	President - Mushim Student Association (MSA) Northern Arizona University			
	Golf, Cricket, Miking, Cearling new Languages, and Haveling new edu			
Languages:	English, Urdu, Hindi, Punjabi, Arabic			
Languages.				
Education:	Northern Arizona University, Flagstaff AZ			
	Bachelor of Science, Computer Science			

Resume of Thad Boyd

1024 E. Balboa Circle	PO Box 09626
Tempe, AZ 85282	Flagstaff, AZ 86011
480 967 - 7038	928 523-3013
thad_x_boyd@cox.net	

Experience

Computer technician Reference: Rene Castaneda, Department Head, 602 2434878 Tasks included storage, refurbishing, inventory, technical support, troubleshooting, repair. Roosevelt School District, Phoenix, AZ, 2001

Education

Major: Computer science Minor: Mathematics		Expect to complete: December 2004 Completed: May 2003		
Minor: Linguistics		Expect to complete: December 2004		
Relevant courses:	capst	one project: OpenBSD tools	Spring 2004	
data		structures	Spring 2001	
	micro	oprocessors	Fall 2002	
	intere	lisciplinary engineering design	Fall 2002/Spring 2003	
	techr	ical writing	Fall 2003	
	opera	iting systems	Fall 2003	
	algor	ithms	Fall 2003	
	mode	ling reactive systems	Fall 2003	
	comp	vilers	Spring 2004	
	langu	lages	Spring 2004	
Northern Arizona University Flagstaff AZ 2000 present				

Northern Arizona University, Flagstaff, AZ, 2000-present

Comptia A+ Certified Service Technician, 2000

Graduated Tempe High School with honors:

National Honors Society, International Thespian Society

Served in Students Recycling Used Technology (StRUT). Reference: Douglas Taysom, head of StRUT, 480 967-1661, ext. 24117 2000

Programming languages

C, C++, Java, Basic, Ada 95

Operating systems

Microsoft: DOS 6.2, Windows 3.1, 95, 98, ME, 2000, XP MacOS System 2+ Linux: Slackware, Gentoo, Mandrake, Red Hat BSD: OpenBSD, MacOSX

Web browsers

Netscape 1+, Internet Explorer 3+, Mozilla, Mozilla Firebird, Opera, Konqueror, Safari

E-Mail

Outlook, Outlook Express, Netscape 3+, Eudora 4+, Mozilla, Mozilla Thunderbird, Mutt, Pine

Hardware

Macintosh Plus, Classic, PowerPC G1,2,3,4 Intel 286, 386, 486, Pentium 1/2/3/4, Celer on AMD 486, Duron, Athlon, Athlon XP, Sparc 5

Résume of Benjamin Michael Atkin Computer Scientist

7360 E. Bader Rd. Flagstaff, AZ 86001-8013 (928) 779-6218 (permanent phone number) (928) 523-3783 (on campus) e-mail: bma3@dana.ucc.nau.edu

Objective

An entry level position in systems or applications programming beginning January 2005.

Experience

Student Help Desk and Computing Lab Assistant Northern Arizona University Flagstaff, AZ	Responsible for assisting students in personal computer and student lab account setup and maintenance. Assisted students in setup of LAN and dial-up connections. 2001-2002.	
Website Designer Northern Arizona University Flagstaff, AZ	Redesigned the physics website. Coded in plain HTML. Gathered information, wrote content, created navigation graphics, and published photos. 2000-2001.	
Website Design and Maintenance Flagstaff Design & Const., Inc.	Built and maintained construction company website. Collected information from many different sources. Set up hosting. Revised two 200+ page manuals. 1999-2003.	
Education		
B. S. Computer Science Northern Arizona University Completion in May 2004	Coursework: Programming Languages, Operating Systems, Reactive Systems, Algorithms, Physics, Calculus	
	Clubs and Organizations: NAU IEEE/CS chapter, NAU Intramurals, Association of University Residence Halls, Linux Users of Northern Arizona.	

Skills

Programming Languages: Perl, Python, Scheme, C/C++, Java, Assembly, Ada, SQL Design Topics: User Interfaces, Databases, Interpreters, File Systems Software: Linux Distributions (Red Hat and Gentoo), emacs, Mozilla, OpenOffice, Postgresql, Apache

References

Dr. Tim Porter	P. O. Box 6010, Flagstaff, AZ 86011
Chair, Dept. of Physics & Astronomy	(928) 523-2540
Tom Atwood	2900 N. West Street, Flagstaff, AZ 86001
President, Flagstaff Design & Construction, Inc.	(928) 774-5097
Mada Kay Morehead	1024 E. Balboa Circle, Tempe, AZ 85282
(Personal Reference)	(480) 967-7038