TechSpot 2.0
Hands-On ICT Internships for Underrepresented Students

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CNIT Dept. at City College of San Francisco

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TechSpot Student Interns

NSF ATE PI Conference
October 22, 2015

NSF ATE Project
DUE 1205032
Welcome to the CNIT department at CCSF! Follow us at:

For events happening at CNIT, visit the CNIT events page!

Start exploring the CNIT Department by looking at this presentation and also at our “Hall of Fame” (email abornstein@ccsf.edu - Abigail Bornstein to be added to the Hall of Fame)

If you are a prospective student for City College, you should visit our page with the Steps to become a student in CCSF.

We offer:
- AS Degree
- CCSF Certificates
- Industry Certificates

Check out the Schedule of Classes and you will notice that we offer face-to-face and online courses to fit your busy schedule.

Use the menu on the left or the links below for more detailed information:
- Information for Students - FAQ and great resources
- Faculty & Staff - Get to know our faculty and staff members

If you have any questions, please contact us or if necessary, you can reach us at the email address linked above.

http://www.ccsf.edu/cnit
Computer Networking & Information Technology
City College of San Francisco

With options in
- Computer Technical Support
- Web Development Techniques
- Cyber Security
- Cisco Networking
- Microsoft Networking
- Wireless Networking

AS Degree in CNIT

Stackable Certificates

Computer Technical Support and Fundamentals of Technical Support
- Web Site Development Techniques
- Mobile Web Development and JavaScript Specialist
- Cyber Security, Microsoft IT Administration, Cisco, and Wireless Networking
What is TechSpot 2.0?

• Student-led Technical Support Center on campus to support students and the community
• Internships for underrepresented students
• Hands-on experience to prepare for external internships, entry-level jobs, entrepreneurship
• Build soft skills while reinforcing tech skills
TechSpot Student Updates

Tamika Jones
CNIT Instructor

Roger Kiel
Master’s Program
ITEC, SFSU

Alisha Taylor
IT Help Desk
Bay Group
Objective #1

Recruit underrepresented students to Fundamentals of Technical Support certificate and/or CNIT AS degree program
Target Student Recruitment

- Target students from enrollment in CNIT 197 Work Experience and Internship
- Earn 1 unit towards AS degree or certificate
- Create on-campus jobs paid through federal work study
“When I see someone that fits the population we are recruiting for, I approach them and let them know that TechSpot is recruiting and he/she would be a great candidate. Can be in the hallway or in the CNIT office if they stop by to borrow the stapler. I give them a flyer and a TechSpot pen. If there are other faculty around I introduce them. If our TechSpot interns available I ask them to show the website. I always make time for these meetings. They don’t take me more than a few minutes and it has proven to be the most successful approach of all. I think I get pretty close to 100%.” -Carmen Lamha, PI
Recruitment by Current TechSpot Interns
TechSpot

TechSpot Is Hiring Interns for fall 2015!

What is TechSpot? TechSpot is a grant-funded program presented by Computer Networking and Information Technology Department (CNIT), to offer internships to students, typically underrepresented in IT, providing them with enhanced training and valuable hands-on experience in the IT field. For more information about TechSpot, please visit us at: techspot.ccsf.edu.

Application Process:

Step 1: Apply online at http://techspot.ccsf.edu/work.html
Step 2: Email unofficial transcript to techspot.ccsf@gmail.com
Have questions or need help?

Drop by for application assistance and more information w/ Roger Kiel or Meli Naseri:

Wednesdays and Fridays
1:00-5:00 pm
from August 17th, 2015
Science Building Rooms 147 and 215

Application Deadline: TBA

We are looking for talented student interns who desire opportunities to learn more about computer technology. Students receive paid internships and valuable information.

Promotional Flyers
Show students as role models
Recruitment through TechSpot Website

A little about us

City College of San Francisco (CCSF), in partnership with Year Up Bay Area, is developing TechSpot 2.0 with the goal of creating opportunities for community college students to gain hands-on work experience in the field of information technology (IT), particularly those students from backgrounds typically underrepresented in this field.

Specific objectives for TechSpot 2.0 are:

1. Recruit students typically underrepresented in the field of IT into the Fundamentals of Technical Support certificate and/or the CNIT Associate degree program.

2. Establish a computer refurbishing, recycling and technical support center to provide students with hands-on work experience that augments CCSF’s existing Fundamentals of Technical Support certificate curriculum.

[Image: techspot.ccsf.edu]
Directions to the Applicant:

Please read the entire application closely and answer the questions asked as best you can.

If you have questions about the application, please email techspot.ccsf@gmail.com. Additional drop-in help and information is available at the start of the Fall 2015 semester.

To begin the application process for a TechSpot Internship:
1. Complete this application
2. Email your unofficial transcript to techspot.ccsf@gmail.com
3. The next cohort will start work in Fall 2015 semester. We will be in touch with applicants when we know how many students we can accept.

NOTES:
• You must complete the entire application to be considered for the internship.
• If an item does not apply to you, write "Not applicable" or "N/A" in the space provided.
Objective #2

Establish student-led technical support center to provide students with hands-on internship and work experience.
Goal: To build a menu of services students can provide in a tech support center.

<table>
<thead>
<tr>
<th>Service</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RAM Upgrade</td>
<td>Scan systems to make recommendations for RAM upgrades.</td>
</tr>
<tr>
<td>Memory Upgrade</td>
<td>Install and set up software applications, including anti-virus, anti-malware, and Microsoft applications from DreamSpark. Make recommendations for software applications and provide support for purchasing and download applications from the Internet.</td>
</tr>
<tr>
<td>Software Install</td>
<td>Check and evaluate computer settings to ensure safe browsing and computer use. Check for and remove viruses or other infections that can slow down your computer, and recommend and install anti-virus and anti-malware software.</td>
</tr>
<tr>
<td>Operating System and Upgrade</td>
<td>Install and upgrade to recent versions of Windows, Mac and Linux operating systems. Support CNIT student downloads from Microsoft DreamSpark.</td>
</tr>
</tbody>
</table>
Challenge: How do we get to this point of students being able to perform all these services?
Solution: Work on them one at a time applying the pop-up model developed here.

<table>
<thead>
<tr>
<th>Service</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>1 Disk Sanitization</td>
<td>Wipe drive of data and provide certificate of disk sanitization.</td>
</tr>
<tr>
<td>2 Operating System Installation and Upgrade</td>
<td>Install and upgrade to recent versions of Windows, Mac and Linux operating systems. Support CNIT student downloads from Microsoft Dreamspark.</td>
</tr>
<tr>
<td>3 Security Diagnostic Check</td>
<td>Evaluate and optimize computer settings to ensure safe browsing and computer use. Check for and remove viruses or other infections that can slow down your computer, and recommend and install anti-virus and anti-malware software.</td>
</tr>
<tr>
<td>4 Software Installation</td>
<td>Install and set up software applications, including anti-virus, anti-malware, and Microsoft applications from DreamSpark. Make recommendations for software applications and provide support for purchasing and download applications from the Internet.</td>
</tr>
<tr>
<td>5 Memory RAM Upgrade</td>
<td>Scan systems to make recommendations for RAM upgrades.</td>
</tr>
</tbody>
</table>
Planning and Schedule

Week 1
Begin teamwork
Donated/out of use computers
Inventory, clean, open, test, refresh hands on hardware skills

Week 2
Issue #1 Disk Sanitization
4 weeks applying model
Pop Up Week 7

Week 3

Week 4

Week 5

Week 6

Week 7

Week 8

Week 9

Week 10

Week 11

Week 12

Week 13

Week 14

Week 15

Week 16

Week 17

Week 18

Issue #4 Anti-Virus/Malware
Install and Security Check
3 weeks applying model
“Pop up” Week 17

Issue #3
Software Installation
3 weeks applying model
“Pop up” Week 14

Issue #2
OS Install/Upgrade
4 weeks applying model
“Pop up” Week 11
## Pop Up Model

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students form teams</td>
<td>Begin Research</td>
</tr>
<tr>
<td>Plan solution in teams</td>
<td>Create the steps to solve</td>
</tr>
<tr>
<td>Test solution in teams</td>
<td>Assemble tools, resources</td>
</tr>
<tr>
<td>Present to peers</td>
<td>Document solution</td>
</tr>
<tr>
<td>Present to faculty</td>
<td>3 minutes</td>
</tr>
<tr>
<td>“Pop Up”</td>
<td>Interact with customers</td>
</tr>
</tbody>
</table>

### The process over 3 or 4 weeks

- **Plan solution in teams**
  - Create the steps to solve
  - Assemble tools, resources
  - Document solution

- **Test solution in teams**
  - Practice skills
  - Use tools
  - Test the process

- **Present to peers**
  - 3 minutes
  - Demo skills
  - Give and receive feedback and evaluation

- **Present to faculty**
  - Same as to peers with edits based on feedback
  - Get additional feedback
  - Presentation skills

- **“Pop Up”**
  - Interact with customers
  - Perform service
  - Perform center functions
  - Report and document results
Form Teams and Begin to Research Issue
Plan Solutions
Test Solutions, Use Tools, Practice Skills
Present to Peers and Faculty
Tech Support Center “Pop Up”
Tech Support Center “Pops Up”

• Our center opens its doors for the afternoon at the end of this 3-4 week process
• We have found that the team is ready to provide services to customers
• Location can vary: empty classroom, open lab or other student areas
• The Pop Up model has been successful and flexible and we believe replicable
Center Operations

• Promote “pop up” date
  – Flyers for end user
  – Share on Social media
  – Word of mouth to supportive faculty & staff

• Support operations with free tools
  – Ticketing system
  – Google Sites
  – Other online tools
TechSpot
@TechSpotccsf
Hands on ICT Experience for Underrepresented Students
City College of San Francisco
techspot.ccsf.edu
Joined September 2013

7 Photos and videos

Twitter @techspotccsf
Key Factors

• Soft skills are a major outcome
  – Teamwork
  – Presentation skills
  – Communication skills (plan, document, share)
  – Project management

• Student-Led Center
  – Create the ticketing software
  – Establish the lab rules
  – Manage pop up model timeline
  – Establish processes and procedures

• Our job: Provide the structure and learning environment. The students are capable of doing the rest.
Unexpected outcomes

• Students began to work more independently and took charge of goal setting and project planning
• Students emerged as leaders
• Students became peer mentors
• Owned pieces of projects and took them above and beyond
Opportunities with Partners and Industry

Supporting Conferences
• CA Joint Special Populations Advisory Committee, Shown here with Jonathan Lightman, FACCC

Industry Networking
• Grow Diversity in Tech MeetUps at Twitter, YouTube

Community Engagement
• Microsoft store, SF
Challenges

• Every student comes with different goals and expectations
  – Not every student wants/is ready to get a job
  – More school, Bach or adv degree, other paths

• Continual recruitment to fill in gaps
  – Students get hired (good for them, affects team)
  – Students have busy times, mid-terms, etc.

• Students expect feedback
  – How will this be given? Based on what?
Challenges

• Working on defining roles of mentor/mentee
• Structure around expectations and less about direct supervision of students
• Timesheets or other check in to track hours
• Consistency of social media promotion
Safe, More Accessible Experience
Opportunities for Feedback
Mentoring
Opportunities for Students
Welcome To TechSpot

TechSpot is a National Science Foundation grant-funded program presented by Computer Networking and Information Technology (CNIT), to offer:

- Internships to students typically underrepresented in IT.

- Providing them with enhanced training & Valuable hands-on experience in the IT field.
Presentations that we have done and presented to the Leaders of TechSpot and team members to improve each others speaking skills in-front of people not only for today but for that dream job we are aiming for in the future.

Link to our Perkins Equipment & RAM Upgrade presentation we did online using emaze softs

Any Questions?

Drop by for application assistance and more information with Roger Kiel or Meli Naseri:

Mondays and Fridays
1:00 - 5:00 pm
From August 17th, 2015
Science Building Rooms 147 & 215

Make a Bootable USB

1. Load DiskMaker X
   When you load the app, it will ask which version of OS X do you want to make a boot disk of

How to Wipe Hard Disk Drive with DBAN.MP4

sites.google.com/site/techspot2ccsf
<table>
<thead>
<tr>
<th>ID</th>
<th>Summary</th>
<th>Assignee</th>
<th>Creator</th>
<th>Priority</th>
<th>Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>RAM Upgrade for 05 Optiplex SX270</td>
<td>Jilem Nase</td>
<td>Richard Wu</td>
<td>High</td>
<td>10/15/2015</td>
</tr>
<tr>
<td>6</td>
<td>Disk Sanitization</td>
<td>Carlos Aca...</td>
<td>feliciasmith@...</td>
<td>High</td>
<td>10/15/2015</td>
</tr>
<tr>
<td>4</td>
<td>computer runs slow</td>
<td>Mitchell Ma...</td>
<td>Guillermo Ayala</td>
<td>Medium</td>
<td>10/09/2015</td>
</tr>
<tr>
<td>1</td>
<td>Welcome to the Spiceworks Help Desk!</td>
<td>Jilem Nase</td>
<td>Jilem Nase</td>
<td>Medium</td>
<td></td>
</tr>
</tbody>
</table>

**RAM Upgrade for 05 Optiplex SX270**

Needs to upgrade RAM to make it run fast
Jilem Nase (Assignee) added a comment
3 days ago

I have attached below a snip showing the kind of memory is compatible with your system and their cost. If you have any question please let us know.

Have a great friday,

Meli

1RWissue.JPG

Jilem Nase set What is the model number? to DCT –
3 days ago

Jilem Nase changed What kind of PC? from OptiPlex 3010 Small Form Factor to OptiPlex SX270 Series –
3 days ago

Jilem Nase set What kind of PC? to OptiPlex 3010 Small Form Factor –
3 days ago

Richard Wu created the ticket "RAM Upgrade for 05 Optiplex SX270"
3 days ago

Needs to upgrade RAM to make it run fast
He wants to upgrade his RAM because his computer is running too slow.

Guillermo Ayala changed due date from 10/15/2015 to 10/14/2015 by Guillermo Ayala

Guillermo Ayala worked on this ticket for 2 hours by Guillermo Ayala

Guillermo Ayala changed due date from 10/15/2015 to 10/15/2015 by Guillermo Ayala

Guillermo Ayala changed status from open to closed by Guillermo Ayala

This motherboard will support up to 4 GB
4 days ago by Guillermo Ayala

Screenshot_2015-10-16-14-41-01.png

RAM prices start from $13.99.
4 days ago by Guillermo Ayala

Screenshot_2015-10-16-14-22-39.png

RAM Memory is identified as DDR2
4 days ago by Guillermo Ayala

IMG_20151016_141948.jpg

Guillermo Ayala changed description from He wants to upgrade his RAM because his computer is running too slow to He wants to upgrade his RAM because his computer is running too slow. by Guillermo Ayala

Guillermo Ayala changed due date from 10/16/2015 to 10/15/2015 by Guillermo Ayala

Guillermo Ayala changed contact from Richard Wu to Guillermo Ayala by Guillermo Ayala