Supplemental Material for UNIT: Unifying Image and Text Recognition in One Vision Encoder

Anonymous Author(s)
Affiliation
Address
email

1 Visualizations

Our model demonstrates significant prowess within potential real-world application scenarios, encompassing tasks such as text recognition with grounding—applicable to both natural images and unadulterated texts—markdown conversion, and Chinese text recognition. To further enhance performance, the model is meticulously fine-tuned using grounding data encompassing 200k images, and Chinese data consisting of 6M images.

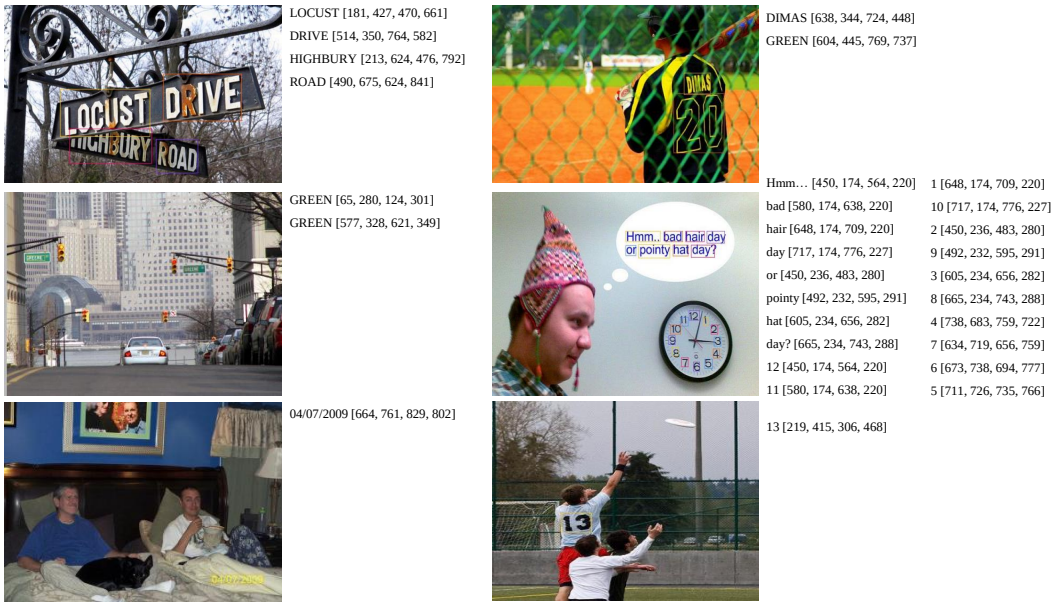


Figure 1: Samples for text recognition with grounding in images. Please see clearly by zooming in.

Submitted to 38th Conference on Neural Information Processing Systems (NeurIPS 2024). Do not distribute.

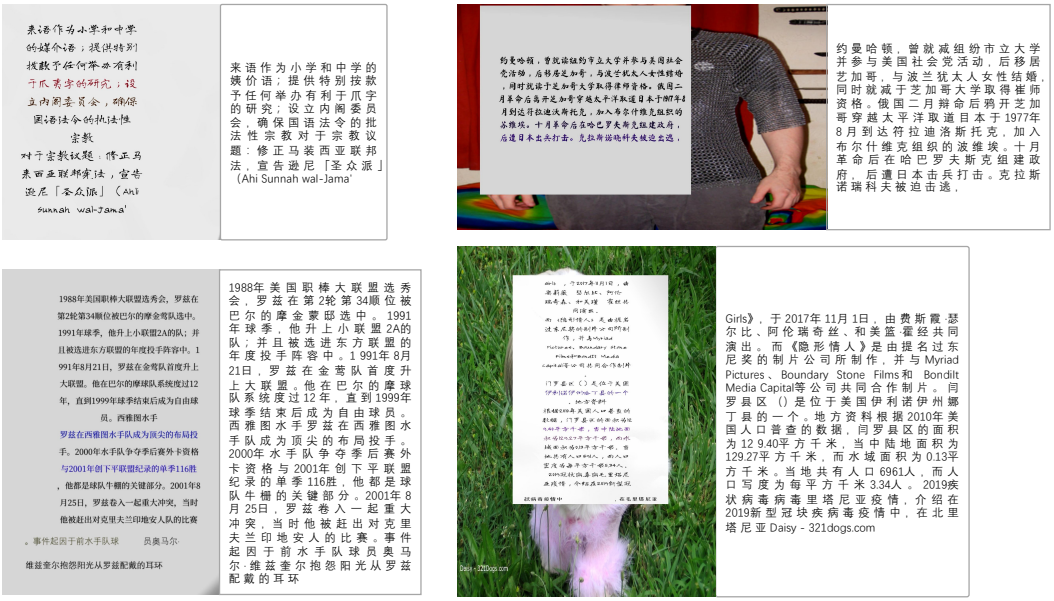


Figure 2: Samples for Chinese text recognition. Please see clearly by zooming in.

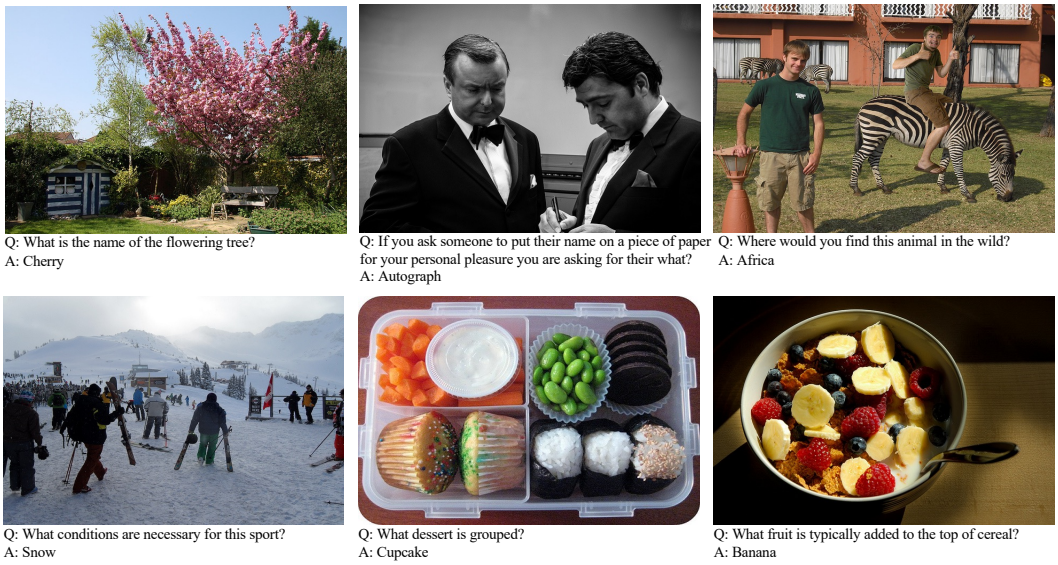
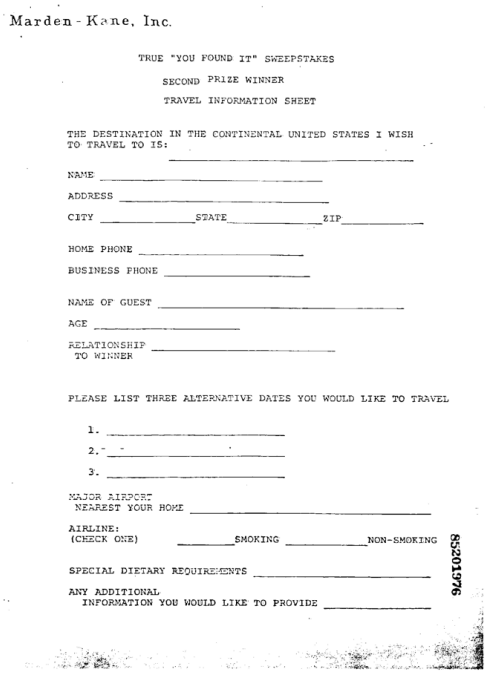


Figure 3: Samples for VQA. Please see clearly by zooming in.



Marden - Kane, Inc.

TRUE "YOU FOUND IT" SWEEPSTAKES

SECOND PRIZE WINNER

TRAVEL INFORMATION SHEET

THE DESTINATION IN THE CONTINENTAL UNITED STATES I WISH TO TRAVEL TO IS: _____

NAME _____

ADDRESS _____

CITY _____STATE_____ZIP_____

HOME PHONE _____

BUSINESS PHONE _____

NAME OF GUEST _____

AGE _____

RELATIONSHIP TO WINNER _____

PLEASE LIST THREE ALTERNATIVE DATES YOU WOULD LIKE TO TRAVEL

1. _____
2. _____
3. _____

MAJOR AIRPORT NEAREST YOUR HOME _____

AIRLINE:
(CHECK ONE) _____SMOKING _____NON-SMOKING

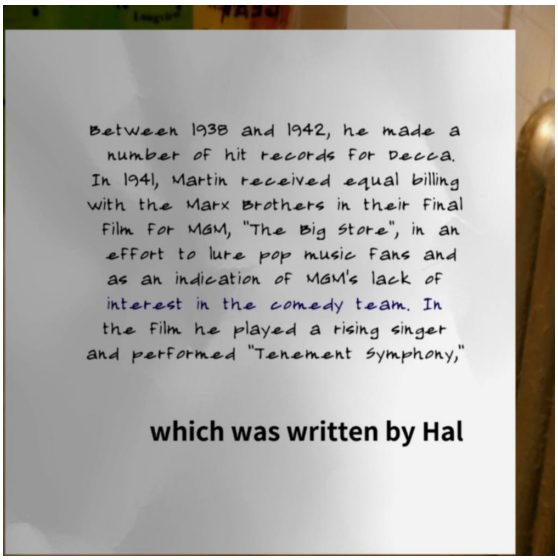
SPECIAL DIETARY REQUIREMENTS _____

ANY ADDITIONAL INFORMATION YOU WOULD LIKE TO PROVIDE _____

85201796

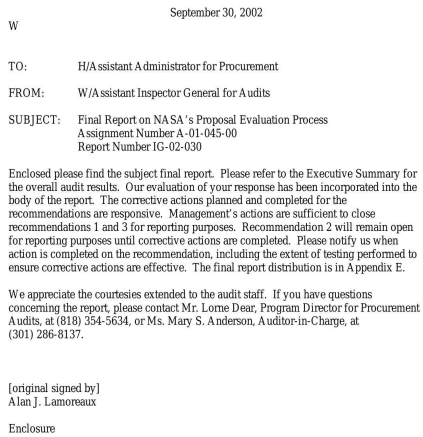
Marden- Kane, Inc. TRUE "YOU FOUND IT" SWEEPSTAKES SECOND PRIZE WINNER TRAVEL INFORMATION SHEET THE DESTINATION IN THE CONTINENTAL UNITED STATES I WISH TO TRAVEL TO IS: NAME ADDRESS CITY STATE ZIP HOME PHONE BUSINESS PHONE NAME OF GUEST AGE RELATIONSHIP TO WINNER PLEASE LIST THREE ALTERNATIVE DATES YOU WOULD LIKE TO TRAVEL 1. 2. 3. MAJOR AIRCORE NEAREST YOUR HOME AIRLINE: (CHECK ONE) SMOKING NON-SMOKING 85201796 SPECIAL DIETARY REQUIREMENTS ANY ADDITIONAL INFORMATION YOU WOULD LIKE TO PROVIDE

Figure 4: Samples for English text recognition. Please see clearly by zooming in.



Between 1938 and 1942, he made a number of hit records for Decca. In 1941, Martin received equal billing with the Marx Brothers in their final film for MGM, "The Big Store", in an effort to lure pop music fans and as an indication of MGM's lack of interest in the comedy team. In the film he played a rising singer and performed "Tenement Symphony,"which was written by Hal

Figure 5: Samples for English text recognition. Please see clearly by zooming in.



September 30, 2002

W

TO: H/Assistant Administrator for Procurement

FROM: W/Assistant Inspector General for Audits

SUBJECT: Final Report on NASA's Proposal Evaluation Process
Assignment Number A-01-045-00
Report Number IG-02-030

Enclosed please find the subject final report. Please refer to the Executive Summary for the overall audit results. Our evaluation of your response has been incorporated into the body of the report. The corrective actions planned and completed for the recommendations are responsive. Management's actions are sufficient to close recommendations 1 and 3 for reporting purposes. Recommendation 2 will remain open for reporting purposes until corrective actions are completed. Please notify us when action is completed on the recommendation, including the extent of testing performed to ensure corrective actions are effective. The final report distribution is in Appendix E.

We appreciate the courtesies extended to the audit staff. If you have questions concerning the report, please contact Mr. Lorne Dear, Program Director for Procurement Audits, at (818) 354-5634, or Ms. Mary S. Anderson, Auditor-in-Charge, at (301) 286-8137.

[original signed by]
Alan J. Lamoreaux

Enclosure

September 30, 2002 TO: H/Assistant Administrator for Procurement FROM: W/Assistant Inspector General for AudITS SUBJECT: Final Report on NASA's Proposal Evaluation Process Assignment Number A-01-045-00 Report Number IC-02-030 Enclosed please find the subject final report. Please refer to the Executive Summary for the overall audit results. Our evaluation of your response has been incorporated into the body of the report. The corrective actions planned and completed for the recommendations are responsive. Management's actions are sufficient to close recommendations 1 and 3 for reporting purposes. Recommendation 2 will remain open for reporting purposes until corrective actions are completed. Please notify us when action is completed on the recommendation, including the extent of testing performed to ensure corrective actions are effective. The final report distribution is in Appendix E. We appreciate the courtees extended to the audit staff. If you have questions concerning the report, please contact Mr. Lorne Dear, Program Director for Procurement Audits, at (818) 354-5634, or Ms. Mary S. Anderson, Auditor-in-Charge, at (301) 286-8137. [original signed by] Alan J. Lamoreaux Enclosure

Figure 6: Samples for English text recognition. Please see clearly by zooming in.

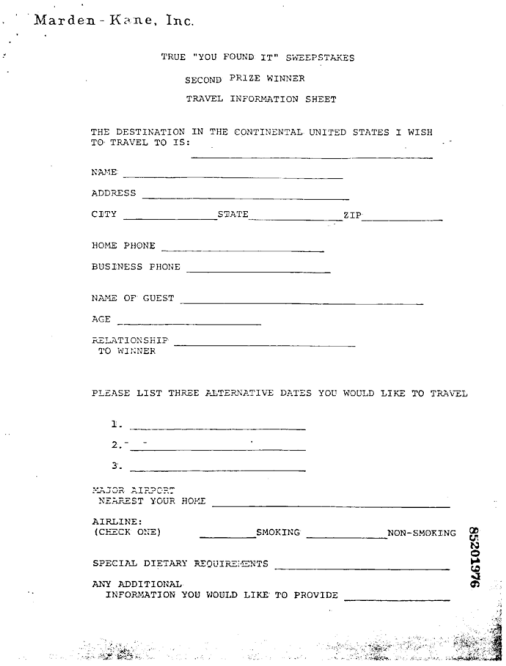


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Figure 7: Samples for English text recognition. Please see clearly by zooming in.

Activities report 2008

placed on actions targeting those who are most distant from the labour market or who are working under the most unstable conditions. This means people who require longer processes and for whom programmes such as Acceder are more essential than ever before. In other words, programmes which design and implement combinations of guaranteed income, access to training and employment and access to mainstream services.

Furthermore, after ten year of work we still observe that a large gap exists between the average level of vocational training and qualification of the Roma community and that of the rest of the population. 75% of the persons served through the FSG's labour market integration programmes have no studies, not even primary school; 20% have a primary school diploma and only the remaining 5% have some sort of higher training (vocational training, high school, University, etc.).

This undeniable lack of qualification has clear consequences for Roma people's likelihood of gaining access to and holding down a job because it clearly diminishes their chances of being hired, generally limiting their access to low-skilled vocational sectors and jobs which tend to be unstable, precarious and offer little chance of professional advancement.

The labour market crisis always affects the most vulnerable and it is being especially hard on Roma who find themselves in situations of social exclusion.

A student worker involved in the UZIPEN training and employment experience in Alicante.

Special mention should also be made of the potential the Roma population has for the labour market. Labour market data concerning Roma shows that they want to work despite rising unemployment, job instability, the low-skilled nature of available work and discrimination suffered in the application process.

The gap between the Roma population and the labour market is a key aspect contributing to a scenario of social discrimination and therefore, in keeping with the importance afforded this issue by the European Employment Strategy and the European Social Inclusion Strategy, the Fundación Secretariado Gitano dedicates a large proportion of its efforts to addressing this problem.

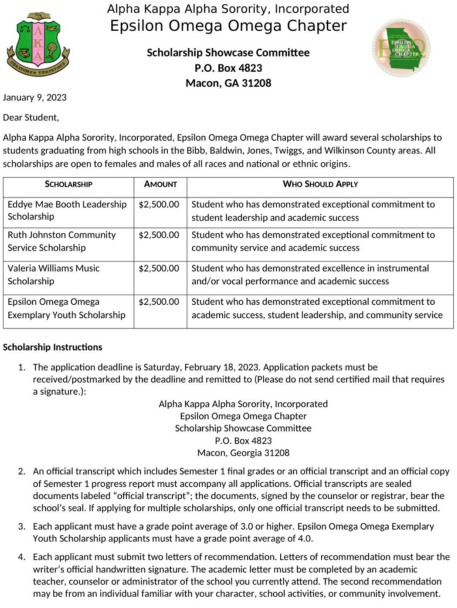
Combating discrimination and support for social inclusion through employment is a tool to promote a more cohesive and intercultural society but labour market integration should not be limited to support for Roma in improving their employability but should also envisage the elimination of red tape and barriers standing in the way to access to

44 | *FSG '08 Annual Report*

Memoria FSG ingle's 2008.indb 44 26/7/09 19:57:09

Activities report 2008 placed on actions targeting those who are most distant from the labour market or who are working under the most unstable conditions. This means people who require longer processes and for whom programmes such as Acceder are more essential than ever before. In other words, programmes which design and implement combinations guaranteed of guaranteed income, access to training and employment and access to mainstream services. Furthermore, after ten year of work we still observe that a large gap exists between the average level of vocational training and A student worker involved in the ISZUIPEN training experience of the Roma community and and EMPLOYMENT EXPERIENCE IS ALCANTE. that of the rest of the population, 726% of the persons served through the FSSG labour market Special mention should also be made of the integration programmes have no studies, not potential the Roma population has for the labour even primary school; 20% have a primary school market. Labour market data concerning Roma diploma and only the remaining 5% have some shows that they want to work despite rising sort of higher training (vocational training, high unemployment, job instability, the low-skilled school, University, etc.). nature of available work and discrimination suffered in the application process. This undeniable lack of qualification has clear consequences for Roma people's lifestyle The gap between the Roma population and the of gaining access to and holding down a job labour market is a key aspect contributing to a because it clearly diminishing their chances of scenario of social discrimination and therefore, being hired, generally limiting their access to in keeping with the importance afforded this low-skilled vocational sectors and jobs which issue by the European Employment Strategy tend to be precarious, and offer little and the European Social Inclusion Strategy, chances of professional advancement. the Fundacion Secretarbitario Gilano dedicates a large proportion of efforts to addressing this problem. The labour market crisis Combating discrimination and support always affects the most for social inclusion through employment vulnerable and it is being intercultural society but labour market who For Roma in improving their employability but in situations of social should also envisage the elimination of red tape exclusion. and barriers standing in the way to access to 44 | FSSG i00 Annual Report Memo FSSG i00 International 44 2967/02 19.27.2019

Figure 8: Samples for English text recognition. Please see clearly by zooming in.



Alpha Kappa Alpha Sorority, Incorporated
Epsilon Omega Omega Chapter

Scholarship Showcase Committee
P.O. Box 4823
Macon, GA 31208

January 9, 2023

Dear Student,

Alpha Kappa Alpha Sorority, Incorporated, Epsilon Omega Omega Chapter will award several scholarships to students graduating from high schools in the Bibb, Baldwin, Jones, Twiggs, and Wilkinson County areas. All scholarships are open to females and males of all races and national or ethnic origins.

Scholarship	Amount	Who Should Apply
Eddye Mae Booth Leadership Scholarship	$2,500.00	Student who has demonstrated exceptional commitment to student leadership and academic success
Ruth Johnston Community Service Scholarship	$2,500.00	Student who has demonstrated exceptional commitment to community service and academic success
Valeria Williams Music Scholarship	$2,500.00	Student who has demonstrated excellence in instrumental and/or vocal performance and academic success
Epsilon Omega Omega Exemplary Youth Scholarship	$2,500.00	Student who has demonstrated exceptional commitment to academic success, student leadership, and community service

Scholarship Instructions

1. The application deadline is Saturday, February 18, 2023. Application packets must be received/postmarked by the deadline and remitted to (Please do not send certified mail that requires a signature.):

   Alpha Kappa Alpha Sorority, Incorporated
   Epsilon Omega Omega Chapter
   Scholarship Showcase Committee
   P.O. Box 4823
   Macon, Georgia 31208

2. An official transcript which includes Semester 1 final grades or an official transcript and an official copy of Semester 1 progress report must accompany all applications. Official transcripts are sealed documents labeled "official transcript"; the documents, signed by the counselor or registrar, bear the school's seal. If applying for multiple scholarships, only one official transcript needs to be submitted.
3. Each applicant must have a grade point average of 3.0 or higher. Epsilon Omega Omega Exemplary Youth Scholarship applicants must have a grade point average of 4.0.
4. Each applicant must submit two letters of recommendation. Letters of recommendation must bear the writer's official handwritten signature. The academic letter must be completed by an academic teacher, counselor or administrator of the school you currently attend. The second recommendation may be from an individual familiar with your character, school activities, or community involvement.

```
| **Scholarship** | **Amount** | **Who Seouloud APV** |
|---|---|---|
| Eddy Mae Booth Leadership Scholarship | $2,500.00 | Student who has demonstrated exceptional commitment to student leadership and academic success |
| Ruth Johnston Community Service Scholarship | $2,500.00 | Student who has demonstrated exceptional commitment to community service and academic success |
| Valeria Williams Music Scholarship | $2,500.00 | Student who has demonstrated excellence in instrumental and/or vocal performance and academic success |
| Epsilon Omega Omega Scholarship | $2,500.00 | Student who has demonstrated exceptional commitment to academic success, student leadership, and community service |


Alpha Kappa Alpha Sorority, Incorporated Epsilon Omega Omega Chapter

**Scholarship Showcase Committee**

**P.O. Box 4823**

**Macon, GA 31208**

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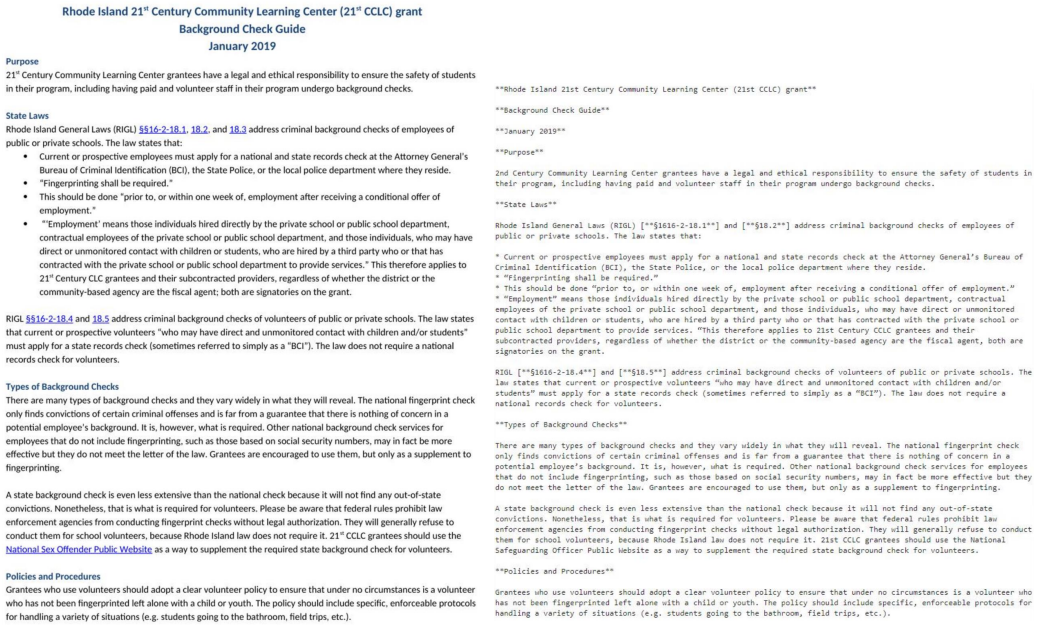
Figure 9: Samples for markdown conversion. Please see clearly by zooming in.



Rhode Island 21st Century Community Learning Center (21st CCLC) grant

Background Check Guide

January 2019

Purpose

2nd Century Community Learning Center grantees have a legal and ethical responsibility to ensure the safety of students in their program, including having paid and volunteer staff in their program undergo background checks.

State Laws

Rhode Island General Laws (RIGL) [**§1616-2-18.1**] and [**§18.2**] address criminal background checks of employees of public or private schools. The law states that:

* Current or prospective employees must apply for a national and state records check at the Attorney General's Bureau of Criminal Identification (BCI), the State Police, or the local police department where they reside.
* "Fingerprinting shall be required."
* This should be done "prior to, or within one week of, employment after receiving a conditional offer of employment."
* "'Employment' means those individuals hired directly by the private school or public school department, contractual employees of the private school or public school department, and those individuals, who may have direct or unmonitored contact with children or students, who are hired by a third party who or that has contracted with the private school or public school department to provide services." This therefore applies to 21st Century CLC grantees and their subcontracted providers, regardless of whether the district or the community-based agency are the fiscal agent; both are signatories on the grant.

RIGL [**§1616-2-18.4**] and [**§18.5**] address criminal background checks of volunteers of public or private schools. The law states that current or prospective volunteers "who may have direct and unmonitored contact with children and/or students" must apply for a state records check (sometimes referred to simply as a "BCI"). The law does not require a national records check for volunteers.

Types of Background Checks

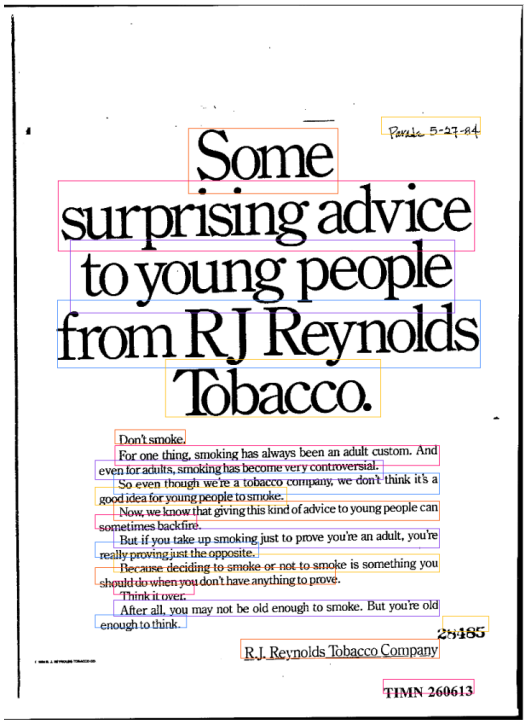
There are many types of background checks and they vary widely in what they will reveal. The national fingerprint check only finds convictions of certain criminal offenses and is far from a guarantee that there is nothing of concern in a potential employee's background. It is, however, what is required. Other national background check services for employees that do not include fingerprinting, such as those based on social security numbers, may in fact be more effective but they do not meet the letter of the law. Grantees are encouraged to use them, but only as a supplement to fingerprinting.

A state background check is even less extensive than the national check because it will not find any out-of-state convictions. Nonetheless, that is what is required for volunteers. Please be aware that federal rules prohibit law enforcement agencies from conducting fingerprint checks without legal authorization. They will generally refuse to conduct them for school volunteers, because Rhode Island law does not require it. 21st CCLC grantees should use the National Sex Offender Public Website as a way to supplement the required state background check for volunteers.

Policies and Procedures

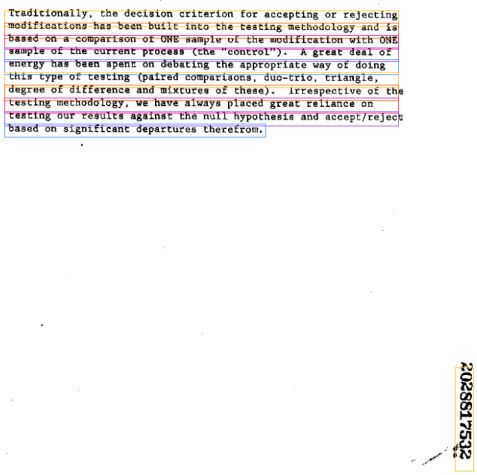
Grantees who use volunteers should adopt a clear volunteer policy to ensure that under no circumstances is a volunteer who has not been fingerprinted left alone with a child or youth. The policy should include specific, enforceable protocols for handling a variety of situations (e.g. students going to the bathroom, field trips, etc.).

Figure 10: Samples for markdown conversion. Please see clearly by zooming in.



Papeke 5-27-84 [671, 140, 829, 162]
Some [365, 155, 603, 236]
surprising advice [159, 220, 819, 308]
to young people [178, 295, 788, 386]
from RJ Reynolds [158, 370, 829, 455]
Tobacco. [329, 444, 670, 516]
Don't smoke. [249, 532, 360, 550]
For one thing, smoking has always been an adult custom. And [249, 552, 764, 577]
even for adults, smoking has become very controversial. [217, 571, 675, 595]
So even though we're a tobacco company, we don't think it's a [247, 622, 764, 613]
good idea for young people to smoke. [217, 604, 521, 627]
Now, we know that giving this kind of advice to young people can [247, 622, 764, 646]
sometimes backfire. [217, 673, 477, 692]
But if you take up smoking just to prove you're an adult, you're [247, 656, 764, 680]
really proving just the opposite. [217, 673, 477, 692]
Because deciding to smoke or not to smoke is something you [247, 688, 764, 711]
should do when you don't have anything to prove. [217, 705, 599, 726]
Think it over. [247, 722, 375, 739]
After all, you may not be old enough to smok. But you're old [247, 746, 764, 766]
enough to think. [217, 764, 362, 780]
28485 [769, 766, 842, 785]
R.J.Reynolds Tobacco Company [448, 795, 764, 819]
TIMN 260613 [675, 845, 818, 863]

Figure 11: Samples for English text recognition with grounding. Please see clearly by zooming in.



Traditionally, the decision criterion for accepting or rejecting [100, 247, 722, 266]
modifications has been built into the testing methodology and is [100, 262, 722, 280]
mased on a comparison of ONE sample of the modification with ONE [100, 277, 722, 294]
sample of the current process (the “control”). A great deal of [100, 292, 722, 309]
energy has been spent on debating the appropriate way of doing [100, 307, 722, 325]
this type of testing (paired comparisons, duo-tri, triangle, [100, 323, 722, 341]
degree of difference and mixtures of these). Irrespective of the [100, 338, 722, 357]
testing methodology, we have always placed great reliance on [100, 354, 722, 372]
testing our results against the null hypothesis and accept/reject [100, 371, 722, 388]
based on significant departures thereform. [100, 386, 512, 402]
2029817532 [812, 685, 841, 812]

Figure 12: Samples for English text recognition with grounding. Please see clearly by zooming in.