SUMMARY PROPOSAL BUDGET

FOR NSF USE ONLY		
PROPOSAL NO.	DURATION (MONTHS) Proposed	Granted
AWARD NO.		

ORGANIZATION: Illinois Institute of Technology

PRINCIPAL INVESTIGATOR/PROJECT DIRECTOR:

A. SENIOR PERSONNEL: PI/PD, Co-PI's, Faculty and Other Senior Associates (List each separately with title, A.7. show number in brackets)	NSF Funded Person-mos. CAL	ACAD	SUMR	Funds Requested By Proposer	Funds Granted By NSF (If Different)
1. Weil, Vivian		0.25	0.75	$ 3,880	$
2. Davis, Michael		0.25	0.75	3,350	
3. Burnstein, Ilene J.		0.25	0.50	2,345	
4.					
5.					
6. ( ) OTHERS (LIST INDIVIDUALLY ON BUDGET EXPLANATION PAGE)					
7. ( ) TOTAL SENIOR PERSONNEL (1-6)					
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)					
1. ( ) POST DOCTORAL ASSOCIATES					
2. ( ) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)					
3. ( ) GRADUATE STUDENTS					
4. ( ) UNDERGRADUATE STUDENTS					
5. ( ) SECRETARIAL - CLERICAL					
6. ( ) OTHER				9,575	
TOTAL SALARIES AND WAGES (A+B)				2,298	
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)				11,873	
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A+B+C)					
D. PERMANENT EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM EXCEEDING $1,000.)					
TOTAL PERMANENT EQUIPMENT					
E. TRAVEL 1. DOMESTIC (INCL. CANADA AND U.S. POSSESSIONS)					
2. FOREIGN					
F. PARTICIPANT SUPPORT COSTS					
1. STIPENDS $					
2. TRAVEL					
3. SUBSISTENCE					
4. OTHER					
( ) TOTAL PARTICIPANT COSTS					
G. OTHER DIRECT COSTS					
1. MATERIALS AND SUPPLIES				350	
2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION					
3. CONSULTANT SERVICES					
4. COMPUTER (ADPE) SERVICES					
5. SUBCONTRACTS				350	
6. OTHER (Communications and Printing)				700	
TOTAL OTHER DIRECT COSTS				12,573	
H. TOTAL DIRECT COSTS (A THROUGH G)					
I. INDIRECT COSTS (SPECIFY RATE AND BASE) 56% of MTDC				7,040	
TOTAL INDIRECT COSTS				19,613	
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)					
K. RESIDUAL FUNDS (IF FOR FURTHER SUPPORT OF CURRENT PROJECTS SEE GPM 252 AND 253)				$19,613	$
L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)					

M. COST SHARING: PROPOSED LEVEL $ — AGREED LEVEL IF DIFFERENT $

PI/PD TYPED NAME & SIGNATURE*: V. Weil Vivian Weil — DATE 4/28/95

INST. REP. TYPED NAME & SIGNATURE*: H. Naqib H. M. Naqib — DATE 4/28/95

FOR NSF USE ONLY — INDIRECT COST RATE VERIFICATION

Date Checked	Date of Rate Sheet	Initials-ORG

NSF Form 1030 (1/94) *Supersedes All Previous Editions*

*SIGNATURES REQUIRED ONLY FOR REVISED BUDGET (GPM 233)

Curriculum Vitae
Ilene Burnstein

Title and Affiliation:

Associate Professor, Computer Science
Illinois Institute of Technology
10 West 31st Street
Chicago, Il 60616
Telephone: 312-576-5155

Education:

Ph.D., Illinois Institute of Technology, Chicago, Il.
M.S., University of Maryland, College Park, MD.
B.S., Brooklyn College, Brooklyn, NY.

Research Interests and Assignments:

Software Engineering: AI-based models, and intelligent systems for software testing and fault localization. Project management, testing management and testing maturity models.

Co-director: Center for Software Engineering Studies, Computer Science Department, Illinois Institute of Technology

Teaching Assignments:

Co-director: Specialized Computer Science Masters Degree in Software Engineering Program

Courses Currenly Taught. Undergraduate: Software Engineering.
Graduate: Software Testing and Quality Assurance, Programming Project Management, Advanced Software Engineering Laboratory.

Recent Publications:

I. Burnstein, C. Chang, C. Tseng, "Modeling the Fault Localization Process with a Blackboard-Based Fault Localization Tool", Proc. Third Midwest AI and Cognitive Society Conf., Carbondale, IL, pp 112-116, April, 1991.

I. Burnstein, S. Mannina, " A Conceptual Model for the Software Fault Localization Process", Proc. Fourth Midwest AI and Cognitive Society Conf., Utica, Il, pp 21-25, May, 1992.

I. Burnstein, N. Jani, S. Mannina, J. Tamsevicious, M. Goldshteyn, L. Lendi, "Intelligent Fault Localization in Software", Proc. IEEE International Test Conference 1992, , Md, pp 917-926, Sept, 1992.

I. Burnstein, N. Jani, S. Mannina, J. Tamsevicious, M. Goldshteyn, L. Lendi, "The Development of A Knowledge-Based Software Fault Localization Tool", Proc. 1992 IEEE International Conference of Systems, Man and Cybernetics, Chicago, Ill, pp 317-322, Oct., 1992.

I. Burnstein, B. Glicklich, "Defining a Program Chunk for Use in Automated Fault Localization", Fifth Midwest AI and Cognitive Society Conf, Chesterton, IN, pp 98-102, April, 1993.

I. Burnstein, C. Robert Carlson, "Developing Leadership Skills in Software Engineering Students Through an Undergraduate Research Program", To appear in: Proc. 8th SEI Conf. on Software Engineering Education, New Orleans, LA, March, 1995.

BIOGRAPHICAL SKETCH

NAME: Bogdan Korel
Department of Computer Science
Illinois Institute of Technology
Chicago, IL 60616

PRESENT RANK: Associate Professor

ACADEMIC EXPERIENCE:

Associate Professor, Illinois Institute of Technology, 1994-present
Assistant Professor, Wayne State University, 1987-1994
Lecturer, Wayne State University, 1986-1987

EDUCATION:

Technical University of Kiev, Kiev, MS., Electrical Engineering, 1974, graduation with distinction.
Oakland University, Rochester, MI, Ph.D., Systems Engineering, 1986.

TEACHING:

Taught many undergraduate and graduate computer science courses.
Founded together with Prof. Ilene Burnstein the MS Program in Software Engineering in the Illinois Institute of Technology.

RESEARCH AREA:

Software Engineering, software testing, automated test data generation, program slicing, automated debugging, software maintenance. Part of this research has been funded by NSF and the industry. The results of this research have been published in over 40 journal and conference papers.

SERVICE

Served as a program committee member for several conferences.
Refereed proposals for NSF and refereed research papers for many journals and conferences.

LIST OF MAJOR PUBLICATIONS:

B. Korel, J. Laski, "Dynamic Slicing in Computer Programs," The Journal of Systems and Software, vol. 13, No. 3, November 1990, pp. 187-195.

B. Korel, "Automated test data generation," IEEE Transactions on Software Engineering, vol. SE-16, No. 8, August 1990, pp. 870-879.

B. Korel, "PELAS-Program Error-Locating Assistant System," IEEE Transactions on Software Engineering, vol. SE-16, No. 8, August 1990, pp. 187-195.

B. Korel, "Dynamic method of software test data generation," Journal of Testing, Verification, and Reliability, vol. 2, No. 4, 1992, pp. 203-213.

B. Korel, "The program dependence graph in static program testing," Information Processing Letters, vol. 24, No. 2, 1987, pp. 103-108.

J. Laski, B. Korel, "A data flow oriented program testing strategy," IEEE Transactions on Software Engineering, vol. SE-9, No. 3, May 1983, pp. 347-354.

B. Korel, H. Wedde, R. Ferguson, "Dynamic method of test data generation for distributed software," Information and Software Technology Journal, vol. 34, No. 8, August 1992, pp. 523-531.