WORKING, EARNING, LEARNING IN THE AGE OF INTELLIGENT TOOLS
The Berkeley WITS Project

November 29, 2017-December 1, 2017
UC Berkeley, Berkeley CA

Organized in collaboration with the Organization for Economic Co-operation and Development, as a contribution to the Going Digital project.

The Kauffman Foundation has provided substantial support and encouragement.

Other groups providing support are:
* Berkeley Roundtable on the International Economy (BRIE- BRIE/ ETLA)
* Center for Human Adapted Artificial Intelligence (CHAI)
* Center for Information Technology Research in the Interests of Society (CITRIS), University of California
* Community and Regional Development Program, U.C. Davis
* The American Jobs Project
* The German Federal Ministry for Labor and Social Affairs
* The German Academic Exchange Service (DAAD)
* The Institute of European Studies
* The Stanford Silicon Valley-New Japan Project
### PROGRAM

November 29, 2017-December 1, 2017  
University of California Berkeley, Berkeley CA

<table>
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<tr>
<th>Time</th>
<th>Event</th>
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<tr>
<td>7:00pm</td>
<td><strong>Reception/Dinner at the Claremont Hotel: Reception A</strong></td>
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<td>Multiplicity: Insights from AI and IA on New Ways to Work and Learn (20’)</td>
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<td></td>
<td>Ken Goldberg</td>
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<td><em>William S. Floyd Jr. Distinguished Chair in Engineering, UC Berkeley; Chair and Professor, Industrial Engineering/Operations Research Department; Director of AUTOLAB and CITRIS “People and Robots” Initiative</em></td>
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Thursday, November 30, 2017

Location for morning sessions: Seaborg Room, Men's Faculty Club

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<tr>
<th>Time</th>
<th>Session</th>
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| 8:30am-10:15am | T1: Introduction  
Chair: John Zysman  
Professor Emeritus, BRIE Founder/Co-Director, Convener- WITS  
University of California, Berkeley  

1. Welcomes from each side (15 minutes)  
   - Berkeley  
     - Paul Alivisatos  
       Executive Vice Chancellor and Provost, UC Berkeley  
     - Shankar Sastry  
       Dean of the College of Engineering, UC Berkeley  
     - Costas Spanos  
       Director CITRIS and the Banatao Institute, Distinguished Professor of EECS; Chief Technical Officer of the Berkeley Education Alliance for Research in Singapore, UC Berkeley  
   - OECD  
     - Andrew Wyckoff  
       OECD, Director, Directorate for Science, Technology and Innovation (the OECD Going Digital project: an overview)  
     - Stefano Scarpetta  
       OECD, Director, Directorate for Employment, Labour and Social Affairs  
     - Montserrat Gomendio  
       OECD, Deputy Director, Directorate for Education and Skills, Head of the OECD Centre for Skills  

2. Opening presentations  
   - OECD Presentation  
     o “The OECD Going Digital project: an overview” (15’)  
       - Andrew Wyckoff, OECD  
     o The “Future of work” project and the OECD Job Strategy: an overview (15’)  
       - Stefano Scarpetta, OECD  
     o Overview of the “Jobs and Skills” pillar of the “Going Digital” project: key issues and policy relevant questions addressed (13’)  
       - Mariagrazia Squicciarini  
         OECD, Directorate for Science, Technology and Industry, Senior Economist  
     o Overview of the “2019 Skills Outlook on Skills and Digitalisation” (13’)  
       - Stéphanie Jamet  
         OECD, Directorate for Education and Skills (EDU), Senior Economist  

GOING DIGITAL  
Making the transformation work for growth and well-being
- Bay Area View
  - Berkeley Project: Concerns and directions presentation for our purposes and directions
    - Laura Tyson
      Distinguished Professor of the Graduate School and Faculty Director of the Institute for Business & Social Impact, UC Berkeley Haas School of Business; Chair, Blum Center for Developing Economies
  - Company concerns: Proposed speakers
    - Hal Varian (15’)
      Chief Economist, Google
    - Stephane Kasriel
      CEO, Upwork

3. Initial discussion of plans and issues

### 10:30am - 12:15pm

**T2: Employment, Labor Markets, and Social Policy:**

*Part I: The Numbers - What do we believe the facts to be?*

**Chairs:**

Jennifer Granholm  
Faculty Member at UC Berkeley’s Goldman School of Public Policy; Senior Advisor, CITRIS; Former Governor of Michigan  
John Zysman

1. OECD Presentation on Employment Social Policy
   - The OECD Future of Work initiative: key issues and policy relevant questions addressed (15’)
     - Stefano Scarpetta, OECD
   - First findings from OECD work addressing jobs, labour market mobility, middle occupations and social protection (15’)
     - Stijn Broecke
     OECD, Senior Economist, Directorate of Employment, Labour and Social Affairs (ELS)

2. McKinsey (abbreviated statement)
   - Susan Lund
     Partner, McKinsey Global Institute

3. Berkeley Comments: Discussants include:
   - Brad DeLong  
     Professor of Economics, UC Berkeley
   - Laura Tyson
   - Giovanni Dosi
     Professor of Economics and Director of Institute of Economics, Scuola Superiore Sant’Anna

4. Open Discussion

### Lunch Break: Logistics

**Lunch at Women’s Faculty Club**
**Location of afternoon sessions: Seaborg room, Men’s Faculty Club**

<table>
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<tr>
<th>Time</th>
<th>Session Description</th>
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| 1:30pm-4:00 pm | **T3: Emerging Technologies and Their Implications for Work and Skills**  
Chair: Costas Spanos  
1. OECD Presentation  
   - Key insights from the Next Production Revolution and the vectors of the digital transformation (20’)  
     - Andrew Wyckoff, OECD  
   - Addressing the need for a coordinated policy approach: The OECD Centre for Skills (20’)  
     - Montserrat Gomendio, OECD  
2. Berkeley Technology Presentations: Tentative list and possible participants  
   - Next Steps in Manufacturing including 3D printing (15’)  
     - Bjoern Hartmann  
     - Associate Professor in EECS, Faculty Director of the Jacobs Institute for  
       Design Innovation, UC Berkeley  
   - Transportation in the digital era (15’)  
     - Alexandre Bayen  
     - Professor of EECS and Civil and Environmental Engineering and Director of  
       the Institute of Transportation Studies, UC Berkeley  
   - The Digital Reworking of Logistics (15’)  
     - Phil Kaminsky  
     - Professor of Industrial Engineering and Operations and Executive Associate  
       Dean of the College of Engineering, UC Berkeley  
   - AI and its implications (15’)  
     - Mark Nitzberg  
     - Executive Director of the Center for Human-Compatible Artificial Intelligence  
   - Synthesis (15’)  
     - Stuart Feldman  
     - Head of Schmidt Sciences, Schmidt Sciences  |

**Coffee Break**
| 4:15-5:45pm | **T4: Employment, Labor Markets and Social Policy**  
**Part II: The Implications**  
**Chairs:**  
Jennifer Granholm  
John Zysman  
1. Berkeley Opening:  
* Jennifer Granholm (15’)
* Annette Bernhardt (15’)
  
  Director, Low-Wage Work Program, Center for Labor Research and Education; Senior Researcher, Institute for Research on Labor and Employment  
* Lenny Mendonca (15’)
  
  Senior Project Emeritus, McKinsey  
OECD Discussion  
* Stefano Scarpetta, OECD  
2. Discussion:  
* Saadia Zahidi  
  
  Head of Education, Gender and Work; Member of the Executive Committee: World Economic Forum  |
| --- | --- |
| 6:00pm | **Reception/Dinner at the Claremont Hotel: Reception B**  
Presentation by McKinsey (30’)
* Susan Lund |
**Location for morning sessions:** Seaborg Room, Men’s Faculty Club

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<th>Time</th>
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<tr>
<td>8:30am-10:30am</td>
<td><strong>F1:</strong> Venture Capital Views on the Future of Skills and Work</td>
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<td>Chair: John Zysman</td>
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<td>✦ Mark Kvamme (20’) Co-founder and Partner, Drive Capital</td>
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<td>✦ Michael Borus (20’) Founding Partner, XSeed Capital; Co-Founder, BRIE</td>
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<td>✦ Patrick Scaglia (20’) Managing Partner, Blue Bear Ventures; Co-founder, CITRIS Foundry Accelerator</td>
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<td>✦ Martin Kenney (20’) Distinguished Professor of Community and Regional Development, UC Davis</td>
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<td>✦ Tim O’Reilly (20’) CEO, O’Reilly Media</td>
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<td>Coffee Break</td>
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<td>11:00am-12:15pm</td>
<td><strong>F2:</strong> National Perspectives</td>
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<td>Chairs: Laura Tyson  John Zysman</td>
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<td>1. China: Martin Kenney (10’)</td>
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<td>2. Denmark: Hanne Shapiro (10’)</td>
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<td>Business owner, Hanne Shapiro Futures</td>
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<td>Niels Christian Nielsen (10’)</td>
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<td>CEO, World Refugee Schools</td>
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<td>3. Finland: Petri Rouvinen (10’)</td>
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<td>Research Director, Research Institute of the Finish Economy (ETLA); CEO, Etlatieto (a subsidiary of ETLA)</td>
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<td>4. Germany: Helmut Krcmar (10’)</td>
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<td>Chair of Information Systems, Department of Computer Science, Technische Universitat Munchen</td>
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<td>5. Japan: Kenji Kushida (10’)</td>
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<td>Research Scholar, Stanford University; Research Affiliate, BRIE</td>
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<td>6. World Economic Forum: Saadia Zahidi (10’)</td>
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**Lunch Break**

**Lunch served at the Men’s Faculty Club**

**Location for afternoon sessions:** CITRIS board room
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<th>Topic</th>
<th>Chair</th>
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<tr>
<td>2:30pm-4:45pm</td>
<td><strong>F3:</strong></td>
<td>Implications for Education and Lifelong Learning</td>
<td>Laura Tyson, John Zysman, Chris Edley</td>
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<td><strong>Chairs:</strong></td>
<td>Distinguished Professor and former Dean of the School of Law; Co-Founder and President, the Opportunity Institute, University of California, Berkeley</td>
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<td><strong>1. Presentations:</strong></td>
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<td></td>
<td>• OECD Presentation of key issues and policy challenges (30’)</td>
<td>Andreas Schleicher, OECD, Director, Directorate of Education and Skills</td>
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<td>• How the public thinks about automation in the workplace and the fate of jobs</td>
<td>Lee Rainie, Pew Research Center, Director of Internet and Technology Research</td>
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<td>• Digital Innovation in Education</td>
<td>Niels C. Nielsen</td>
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<td>• Moving across jobs: mapping skills distances to inform training needs</td>
<td>Mariagrazia Squicciarini and Stéphanie Jamet, OECD</td>
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<td><strong>2. Discussion:</strong></td>
<td>Hanne Shapiro, Claire Tomlin, Mary Walshok</td>
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<td>• Hanne Shapiro, Charles A. Desoer Chair in the College of Engineering, Professor in EECS at UC Berkeley</td>
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<td>• Mary Walshok, Dean of the University Extension and Associate Vice Chancellor for Public Programs, UC San Diego</td>
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<td>4:45pm-5:00pm</td>
<td><strong>F4:</strong></td>
<td>Summary and Further Steps</td>
<td>Laura Tyson</td>
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<td><strong>Chair:</strong></td>
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<td>1. Options: Berkeley Work</td>
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<td>2. Options and next steps for OECD</td>
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